

Illinois Natural History Survey
Prairie Research Institute
University of Illinois at
Urbana-Champaign



Federal Aid Project
Number W-112-R-21
Number W-112-R-22
Job Number 101.5
Job Number 102.2
Wildlife Restoration
Oct. 1, 2011-Sept. 30, 2013

Marc Miller, Director
Illinois Department of Natural
Resources

Paul Vehlou
Federal Aid Coordinator

John E. Buhnerkempe
Chief, Division of Wildlife
Resources

Stakeholder Attitudes Toward Deer Management and Chronic Wasting Disease in Illinois



Craig A. Miller, Ph.D.
Program Leader and Principal Investigator
Human Dimensions Research Program
Illinois Natural History Survey

Prepared by
Craig A. Miller, Ph.D., **Meghan E. McCleary**,
Erin E. Harper and **Linda K. Campbell**



INHS Technical Report 2013 (32)
September 05, 2013

Suggested Citation:

Miller, Craig A., M.E. McCleary, E.E. Harper, and L.K. Campbell. 2013. Stakeholder Attitudes Toward Deer Management and Chronic Wasting Disease in Illinois. Job Completion Report, Federal Aid in Wildlife Restoration W-112-R-21 & 22. Human Dimensions Research Program Report HR-11-05/INHS Technical Report (32). Illinois Natural History Survey, Champaign, IL. 141pp.

TABLE OF CONTENTS

LIST OF TABLES	i
LIST OF FIGURES	ii
INTRODUCTION.....	1
OBJECTIVES	2
METHODS	2
RESULTS	4
.....Perceived Deer Population and Deer Harvest.....	4
.....Perceived Importance of Factors Used in Setting Deer Population Goals	9
.....Hunter and Homeowner Beliefs About CWD in Illinois.....	14
.....Illinois Hunter and Homeowner Knowledge of CWD	24
.....Previous Knowledge of IDNR Actions in response to CWD	29
.....Perceived Effectiveness of IDNR Management Actions in Reducing CWD	33
.....Perceived Importance of IDNR Monitoring CWD in Illinois	36
.....Preferred Level of Action for IDNR to Pursue to Control CWD	38
.....Preferred IDNR Action for Controlling CWD and Maintaining Deer Populations..	41
.....Perceived Trust in IDNR for Managing CWD	43
.....Acceptance Levels from IDNR Management Actions and Potential Outcomes	51
.....Preferred Strategies for IDNR Management of CWD	56
.....Preferred Amount of Resources IDNR Committed to CWD.....	57
.....Perceived Aggressiveness of IDNR's Approach to Control CWD	57
.....Perceived Effectiveness of Sharpshooting to Control CWD in Illinois.....	58
.....Perceived Threat of CWD to Hunting	59
.....Perceived risks of CWD and related illnesses and diseases	63
..... Potential for Conflict Index (PCI)	67
.....Acceptability of CWD Management Practices	67
.....Trust in IDNR Management of CWD.....	72
.....Beliefs Regarding CWD	84
DISCUSSION	94
.....Perceived Importance of Factors Used in Setting Deer Population Goals	94
.....Perceived Effectiveness of IDNR Management Actions in Reducing CWD	95
.....Perceived Importance of IDNR Monitoring CWD in Illinois	96
.....Preferred Level of Action for IDNR to Pursue to Control CWD	96
.....Perceived Trust in IDNR for Managing CWD	97
.....Hunter and Homeowner Beliefs About CWD in Illinois.....	97
.....Preferred IDNR action for controlling CWD and maintaining deer populations	98
.....Perceived Deer Population and Deer Harvest.....	99
.....Previous Knowledge of IDNR Actions in response to CWD	99
.....Illinois Hunter and Homeowner Knowledge of CWD	100

.....Perceived Risks of CWD and Related Illnesses and Diseases.....	100
.....Potential for Conflict Index (PCI).....	101
CONCLUSION	102
REFERENCES.....	104
APPENDIX A Northern Illinois Deer Hunter Survey.....	105
APPENDIX B Northern Illinois Deer Public Survey	118
APPENDIX C Statewide Illinois Deer Hunter Survey	127
APPENDIX D Cover letter that accompanied mailings of the surveys	140
APPENDIX E Thank You/Reminder Postcard.....	141

LIST OF TABLES

	<u>Page</u>
Table 1..... Deer observed by Illinois hunters & homeowners compared to previous years.....	5
Table 2..... Deer harvested by Illinois hunters compared to previous years.....	5
Table 3..... Hunter perceptions of deer population in county hunted most often.....	6
Table 4..... Deer harvest change among Illinois hunters in county hunted most often.....	7
Table 5..... Total deer harvest change in Illinois over the past five years.....	7
Table 6..... Homeowner deer population preferences.....	8
Table 7..... Homeowner attitudes about deer.....	8
Table 8..... Deer population goals: Number of deer acceptable to general public.....	10
Table 9..... Deer population goals: Importance of amount of disease in deer herd.....	11
Table 10..... Deer population goals: Importance of deer-vehicle collisions.....	11
Table 11..... Deer population goals: Importance of number of deer desired.....	12
Table 12..... Deer population goals: Importance of amount of damage done by deer to crops.....	13
Table 13..... Deer population goals: Importance of impact of deer on their natural habitat.....	13
Table 14..... Deer population goals: Importance of overall health of the deer herd.....	14
Table 15..... Participant beliefs: CWD could spread throughout Illinois deer herds.....	15
Table 16..... Participant beliefs: CWD could wipe out deer herds in Illinois.....	15
Table 17..... Participant beliefs: We should reduce deer population in northern Illinois to control CWD.....	16
Table 18..... Participant beliefs: Hunters are more effective at managing CWD than IDNR.....	17
Table 19..... Participant beliefs: CWD is natural and we should let it take its course in deer.....	17
Table 20..... Participant beliefs: IDNR exaggerates risk of CWD-infected venison.....	18
Table 21..... Participant beliefs: We should eliminate CWD from the deer population.....	19
Table 22..... Participant beliefs: IDNR has taken the right steps to control CWD spread in Illinois.....	19
Table 23..... Participant beliefs: Hunting can control CWD more effectively than sharpshooting.....	20
Table 24..... Participant beliefs: CWD must be controlled in northern Illinois.....	21
Table 25..... Participant beliefs: CWD is a serious threat to deer herds in Illinois.....	21
Table 26..... Participant beliefs: CWD will spread without sharpshooting in northern Illinois.....	22
Table 27..... Participant beliefs: IDNR should continue sharpshooting programs until CWD is gone.....	23
Table 28..... Participant beliefs: IDNR's CWD management is similar to Wisconsin DNR.....	23
Table 29..... Stakeholder knowledge of CWD presence in Illinois.....	25
Table 30..... Stakeholder knowledge of CWD distribution in the United States.....	25
Table 31..... Stakeholder knowledge of fatality of CWD in deer.....	25
Table 32..... Stakeholder knowledge about curing CWD in deer.....	26
Table 33..... Stakeholder knowledge of CWD existence in Illinois.....	27
Table 34..... Stakeholder knowledge of CWD existence in Wisconsin.....	27
Table 35..... Stakeholder knowledge of number of CWD-positive deer statewide in the past 10 years.....	28
Table 36..... Hunter knowledge of IDNR increase in number of deer permits for hunting CWD-affected counties.....	30
Table 37..... Hunter knowledge of IDNR deer sharpshooting in CWD areas.....	30
Table 38..... Hunter knowledge of IDNR testing deer harvested in CWD-affected counties.....	30
Table 39..... Hunter knowledge of IDNR holding CWD management hunts in CWD-affected counties.....	31
Table 40..... Hunter knowledge of IDNR testing deer from counties NOT affected by CWD.....	32
Table 41..... Hunter knowledge of IDNR reducing population of deer in CWD-affected counties.....	32
Table 42..... Hunter knowledge of IDNR banning the feeding of wild deer.....	32
Table 43..... Hunter knowledge of IDNR funding research for CWD and its spread.....	33
Table 44..... Effectiveness of increased deer harvest in CWD-affected counties.....	34
Table 45..... Effectiveness of deer sharpshooting in CWD areas to supplement hunting.....	34
Table 46..... Effectiveness of reduced populations of deer in CWD-affected counties.....	35
Table 47..... Effectiveness of CWD management hunts in CWD-affected counties.....	35
Table 48..... Importance of testing of deer in CWD counties to monitor local distribution.....	37
Table 49..... Importance of testing of deer in non-CWD counties to determine spread of CWD.....	37
Table 50..... Importance of testing of YOUR deer to.....	37
Table 51..... Increase deer harvest through CWD-affected counties.....	39
Table 52..... Use deer sharpshooting in CWD areas to supplement hunting.....	39
Table 53..... Testing deer harvested by hunters in CWD-affected counties.....	39
Table 54..... Holding special CWD management hunts in CWD-affected counties.....	40
Table 55..... Reducing deer populations in CWD-affected counties.....	41
Table 56..... Testing deer harvested from counties not affected by CWD.....	41
Table 57..... Participant preference of sharpshooting versus CWD spread.....	42
Table 58..... Participant preference of deer population versus likelihood of shooting an infected deer.....	43
Table 59..... Participant preference of sharpshooting versus infected deer population.....	43
Table 60..... IDNR trust rating: Provide enough information to decide actions regarding CWD.....	44
Table 61..... IDNR trust rating: Provide best available information on CWD in Illinois.....	45
Table 62..... IDNR trust rating: Make good deer management decisions on CWD issues.....	45
Table 63..... IDNR trust rating: Provide adequate opportunities to listen to hunters' concerns about CWD.....	46
Table 64..... IDNR trust rating: Provide timely information regarding CWD issues.....	47
Table 65..... IDNR trust rating: Provide truthful information about human safety regarding CWD.....	47
Table 66..... IDNR trust rating: Provide truthful information about deer population estimates.....	48
Table 67..... IDNR trust rating: Provide truthful information about how CWD spreads.....	49

Table 68.....	IDNR trust rating: Provide truthful information on number of CWD-positive deer in Illinois	49
Table 69.....	IDNT trust rating: Follow the best available science in managing CWD	50
Table 70.....	IDNT trust rating: Properly address CWD in Illinois.....	50
Table 71.....	Hunter acceptance of increased deer harvest in CWD-affected counties	52
Table 72.....	Hunter acceptance of slightly decreased deer harvest through hunting CWD-affected counties	52
Table 73.....	Hunter acceptance of significantly decreased deer harvest by hunting in CWD-affected counties	52
Table 74.....	Hunter acceptance of deer sharpshooting in known CWD areas to supplement hunting	53
Table 75.....	Hunter acceptance of holding special CWD management hunts in CWD-affected counties.....	53
Table 76.....	Hunter acceptance of no action to manage CWD.....	54
Table 77.....	Hunter acceptance of reduced populations of deer in CWD-affected counties	55
Table 78.....	Hunter acceptance of seeing fewer deer because of CWD management	55
Table 79.....	Hunter acceptance of decreased hunter harvests of deer in CWD-affected counties.....	56
Table 80.....	Most important IDNR management action	56
Table 81.....	Commitment of resources the IDNR should use to prevent CWD	57
Table 82.....	Illinois hunter and homeowner perceived aggressiveness of IDNR's approach on CWD	58
Table 83.....	Illinois hunter perceived effectiveness of sharpshooting to control spread of CWD.....	59
Table 84.....	Threat opinions: the threat of CWD has been exaggerated	60
Table 85.....	Threat opinions: familial concern of eating deer meat because of CWD	60
Table 86.....	Threat opinions: CWD poses a risk to deer, but not to humans.....	61
Table 87.....	Threat opinions: CWD may pose a risk to humans but not enough is known.....	62
Table 88.....	Threat opinions: CWD may cause disease in humans who eat infected meat	62
Table 89.....	Threat opinions: because of CWD I have concerns about eating deer meat.....	63
Table 90.....	Stakeholder personal risk: contracting Lyme disease	64
Table 91.....	Stakeholder personal risk: becoming ill from CWD	64
Table 92.....	Stakeholder personal risk: becoming ill from Salmonella food poisoning	64
Table 93.....	Stakeholder personal risk: becoming ill from E. coli food poisoning	65
Table 94.....	Stakeholder personal risk: contracting rabies	66
Table 95.....	Stakeholder personal risk: contracting West Nile Virus.....	66
Table 96.....	Stakeholder personal risk: contracting Mad Cow (BSE) Disease.....	66

LIST OF FIGURES

Figure 1	PCI*: Hunter acceptance of deer sharpshooting in known CWD areas	68
Figure 2	PCI: Hunter acceptance of special CWD management hunts in CWD counties	69
Figure 3	PCI: Hunter acceptance of taking no action to manage CWD	70
Figure 4	PCI: Hunter acceptance of decreased hunter harvest in CWD counties	71
Figure 5	PCI: Trust IDNR to provide information to decide my actions.....	73
Figure 6	PCI: Trust IDNR to provide best information on CWD in Illinois	74
Figure 7	PCI: Trust IDNR to make good management decisions for CWD issues	75
Figure 8	PCI: Trust IDNR to provide opportunities to listen to hunters' concerns about CWD.....	76
Figure 9	PCI: Trust IDNR to provide timely information for CWD issues.....	77
Figure 10	PCI: Trust IDNR to provide truthful information for human safety	78
Figure 11	PCI: Trust IDNR to provide truthful information for deer population estimates	79
Figure 12	PCI: Trust IDNR to provide truthful information on how CWD spreads.....	80
Figure 13	PCI: Trust IDNR to properly address CWD in Illinois.....	81
Figure 14	PCI: Trust IDNR to provide truthful information on CWD-positive deer discovered in Illinois	82
Figure 15	PCI: Trust IDNR to follow best science in managing CWD	83
Figure 16	PCI: Participant beliefs: If unchecked CWD could spread throughout Illinois deer herd.....	85
Figure 17	PCI: Participant beliefs: If unchecked CWD could wipe out deer herds in Illinois	86
Figure 18	PCI: Participant beliefs: Reduce deer population in northern Illinois as needed for CWD.....	87
Figure 19	PCI: Participant beliefs: IDNR has taken the right steps controlling spread of CWD in Illinois	88
Figure 20	PCI: Participant beliefs: Hunters are more effective at managing CWD than IDNR	89
Figure 21	PCI: Participant beliefs: Hunting can control CWD more than sharpshooting.....	90
Figure 22	PCI: Participant beliefs: CWD must be controlled in northern Illinois even if fewer deer	91
Figure 23	PCI: Participant beliefs: CWD will spread without sharpshooting in northern Illinois.....	92
Figure 24	PCI: Participant beliefs: IDNR's sharpshooting program should continue until CWD is gone	93

*PCI=Potential for Conflict Index

Stakeholder Attitudes Toward Deer Management and Chronic Wasting Disease in Illinois: A survey of hunters and homeowners

**STATE OF ILLINOIS
PROJECT NUMBER W-112-R-21
STUDY 101
JOB 101.5
STUDY 102
JOB 102.2**

**Federal Aid in Wildlife Restoration
W-112-R-21
W-112-R-22**

Craig A. Miller
Program Leader and Principal Investigator
Human Dimensions Research Program
Illinois Natural History Survey
Champaign, IL 61820
(217) 244-0691

Report prepared by
Craig A. Miller, Meghan E. McCleary,
Erin E. Harper, and
Linda K. Campbell
September 5, 2013

Marc Miller, Director

Illinois Department of Natural Resources

John Buhnerkempe, Chief

Division of Wildlife Resources

Equal opportunity to participate in programs of the Illinois Department of Natural Resources (IDNR) and those funded by the U.S. Fish and Wildlife Service and other agencies is available to all individuals regardless of race, sex, national origin, disability, age, religion or other non-merit factors. If you believe you have been discriminated against, contact the funding source's civil rights office and/or the Equal Employment Opportunity Officer, IDNR, One Natural Resources Way, Springfield, IL 62702-1271; 217/785/0067; TTY 217/782/9175.

Introduction

Chronic Wasting Disease (CWD) is a transmissible spongiform encephalopathy contagious among members of the Cervid family, including white-tailed deer (*Odocoileus virginianus*). CWD first appeared in Illinois during 2002 and as of August 31, 2012 a total of 372 positive cases had been located in 10 counties in northern Illinois.

Several studies have been conducted on the human dimensions of CWD, with most of these studies focused on hunters in Illinois, Wisconsin, Colorado, and other western states. In a 2003 study of deer hunters in Illinois, 54% of hunters expressed uncertainty in the possibility of humans contracting CWD (Miller, 2004). Seventeen percent of participants expressed concern with the possibility of contracting CWD from eating deer meat and 10% felt that the threat of CWD had been exaggerated. A majority of hunters indicated if they were to change any of their behaviors it would be to hunt in a different county that did not have CWD. Lyon & Vaske (2010) found as prevalence and distribution of CWD increase so does the percent of hunters who stop hunting in the state. They also found changes in hunting behavior to be influenced by the perceived risk to human health.

When CWD was first discovered in Wisconsin, the Wisconsin Department of Natural Resources (WDNR) attempted to fully eradicate the disease based on the possibility of rapid spread of CWD made possible by high deer densities, leading to a sharp decline in deer population across the state if the disease became established (Holsman et. al, 2010). This was considered a feasible approach because CWD was found only in a concentrated area. The IDNR took a different approach to CWD management due to limited success of the WDNR eradication effort and Wisconsin hunters' opposition to their management strategies.

It has been shown that as trust in an agency increases participants perception of risk will decrease. Needham and Vaske (2008) found that hunters who perceived the agency to hold

values similar to their own perceived less risk associated with CWD. Therefore, agency trust has been included as an independent variable for this study.

Objectives

This study was conducted to determine stakeholder:

- perceptions of deer populations and harvests at the time of the study
- knowledge of CWD and awareness of CWD management actions
- perceptions of IDNR management actions to control CWD
- levels of support or opposition to specific management actions
- preferences for specific outcomes

Methods

We conducted 3 separate surveys of constituents in CWD management: deer hunters in northern Illinois, homeowners in the CWD counties, and hunters in the remainder (downstate) of the state. Following is a detailed description of methods employed for each of these separate surveys.

Northern Illinois Hunters

We conducted a mail survey of 6,000 randomly selected 2010 deer permit holders stratified by county where their permits were issued: CWD county (n= 3,000) and one to two counties adjacent to CWD counties (n=3,000), and deer permit type: shotgun (n=4,483), muzzleloader (n=64), and archery deer permits (n=1,453). We mailed a packet containing a cover letter explaining the study, survey questionnaire, and first-class stamped return envelope beginning July 20, 2012. Each packet was followed by a postcard thank you/reminder 14 days later. We conducted 3 questionnaire packet and 2 postcard mailings. Questionnaire items were developed in cooperation with Forest Wildlife Program staff from the Illinois Department of Natural

Resources. The questionnaire was a 16-page booklet (8.5x7 inch) format and addressed respondents' awareness and knowledge of CWD, hunting behaviors in regard to CWD, and attitudes toward/preference for specific management actions. We received 3391 usable responses (58%).

Northern Illinois Homeowners

Concurrent with the study of hunters, we also conducted a mail survey of 5,000 owners of single-family homes located in the 10 CWD counties, with mailings commencing July 20, 2012. The survey questionnaire was developed in the same manner and was 12 pages in length. We followed the same data collection procedure as with the hunters: mailing a packet containing a cover letter explaining the study, questionnaire, and stamped return envelope, followed 14 days later by a postcard thank you/reminder. We mailed 3 waves of questionnaire packet/postcards and received 1615 (35%) completed questionnaires.

Downstate Hunters

We surveyed a stratified (archery, shotgun, muzzleloader) random sample of 4,261 deer hunters from the remaining 73 counties not included in the study of northern Illinois deer hunters. The questionnaire was developed in the same manner as those for the other studies and contained the same questions addressing perceptions of, attitudes toward, and preference for management of CWD as the northern Illinois deer hunters. Mailings began October 23, 2012 and were administered following the same procedure as the survey of northern Illinois hunters. We received a total of 2272 (56%) completed questionnaires.

Data Analysis

Data were entered in SPSS v.20 by staff of the INHS Human Dimensions Research Program.

Analyses included Chi-square, One-way ANOVA, and Potential for Conflict Index where appropriate.

Results

Perceived Deer Population and Deer Harvest

Illinois hunters were asked their opinion of the deer population and the amount of deer they harvested on a 7-point scale (1=“Decreased Considerably,” 4=“No Change,” 7=“Increased Considerably”). One-third of hunters in CWD counties (35.6%) indicated that the number of deer they saw in the 2011-2012 season(s) “Decreased Considerably” compared to five years ago; hunters in adjacent counties most frequently responded “Decreased Slightly” (23.0%) followed by “No Change” (21.5%) and “Decreased Considerably” (20.6%), whereas downstate hunters indicated “No Change” (22.2%) or “Decreased Slightly” (22.0%) (Table 1). Greater than one third of homeowners (37.5%) felt there was “No Change” in deer populations for the county they live in. When asked about the number of deer they harvested in 2011-2012 compared to five years ago, hunters in Illinois most frequently responded “No Change” (32.5% of hunters in CWD counties, 39.0% of hunters in adjacent counties, and 37.5% of downstate hunters); 28.1% of hunters in CWD counties also responded “Decreased Considerably” (Table 2). Over half (56%) of the hunters surveyed from CWD counties responded that the deer population in the county they hunted most often was “Too Low” or “Low”; approximately one-third (34.4%) felt the population was “About right” (Table 3). The most frequent response describing the deer population among hunters outside of CWD counties was “About right” (46.0% in adjacent counties and 43.9% downstate) followed by “Low” (32.0% and 32.2%, respectively).

Table 1. Comparison of deer observed by Illinois hunters and homeowners during 2011-12 to previous 5 years.

How does the number of deer you saw during the 2011-12 season(s) compare to 5 years ago?							
	Decreased Considerably %	Decreased %	Decreased Slightly %	No Change %	Increased Slightly %	Increased %	Increased Considerably %
Hunters in CWD counties (n=1637)	35.6	18.6	16.4	18.2	6.6	3.5	1.2
Hunters in Adjacent Counties (n=1560)	20.6	17.0	23.0	21.5	10.5	6.0	1.4
Downstate Hunters (n=2057)	17.9	16.5	22.0	22.2	11.6	7.3	2.4
Homeowners* [†] (n=1556)	9.4	7.3	16.0	37.5	17.0	8.5	4.2

*Homeowners who do not hunt, nor have a member of the household that hunts.

[†]Homeowners were asked specifically about seeing deer in 2011 in the county they *live in*.

Table 2. Comparison of deer harvested by Illinois hunters during 2011-12 to previous 5 years.

How does the number of deer you harvested during the 2011-12 season(s) compare to 5 years ago?							
	Decreased Considerably %	Decreased %	Decreased Slightly %	No Change %	Increased Slightly %	Increased %	Increased Considerably %
Hunters in CWD counties (n=1589)	28.1	15.0	17.2	32.5	5.4	1.4	0.3
Hunters in Adjacent Counties (n=1511)	20.5	14.2	17.7	39.0	5.8	1.9	1.0
Downstate Hunters (n=1991)	15.7	13.5	23.0	37.5	7.4	2.3	0.7

Table 3. Illinois hunters' perceptions of deer population in county hunted most often during 2011-12.

Please describe the deer population in the county where you hunted deer most often during 2011-12.					
	Too low %	Low %	About right %	High %	Too high %
Hunters in CWD counties (n=1708)	21.5	34.8	34.4	8.0	1.2
Hunters in Adjacent Counties (n=1630)	10.5	32.0	46.0	9.9	1.7
Downstate Hunters (n=2070)	9.8	32.2	43.9	11.2	2.9

Hunters in Illinois most frequently perceived that the “total deer harvest in the county [they] hunted most often during the 2011-2012 season(s)” has “Decreased Slightly” over the past five years; 29.8% of hunters in CWD counties, 32.6% in adjacent counties, and 30.5% downstate expressed this opinion (Table 4). The second-most frequent response for hunters in CWD counties was “Decreased Considerably” (22.7%) with “No Change” for hunters in adjacent counties (24.3%) and downstate hunters (26.2%); 19.1% of hunters in CWD counties also felt there was “No Change” in total deer harvest. There was a consensus among Illinois hunters that “total deer harvest in Illinois over the past five years” has “Decreased Slightly”; 38.3% of hunters in CWD counties, 36.3% in adjacent counties, and 31.9% of downstate hunters answered this way (Table 5). Other perceptions of total deer harvest fell between “Increased Slightly” (15.4% in CWD counties, 20.5% in adjacent counties, and 28.3% downstate) and “No Change” (16.0%, 19.0%, and 28.3%, respectively).

Table 4. Perceived deer harvest among Illinois hunters in county hunted most often in 2011-12.

How do you think the total deer harvest in the county where you hunted most often during the 2011-12 season(s) has changed over the past 5 years?							
	Decreased Considerably %	Decreased %	Decreased Slightly %	No Change %	Increased Slightly %	Increased %	Increased Considerably %
Hunters in CWD counties (n=1695)	22.7	18.5	29.8	19.1	7.8	1.4	0.6
Hunters in Adjacent Counties (n=1608)	10.9	15.2	32.6	24.3	13.0	3.0	0.9
Downstate Hunters (n=2057)	7.1	14.0	30.5	26.2	16.5	5.1	0.6

Table 5. Perceived deer harvest in 2011-12 by Illinois hunters.

Do you think the total deer harvest in Illinois over the past 5 years has decreased or increased?							
	Decreased Considerably %	Decreased %	Decreased Slightly %	No Change %	Increased Slightly %	Increased %	Increased Considerably %
Hunters in CWD counties (n=1685)	12.8	14.8	38.3	16.0	15.4	1.9	0.8
Hunters in Adjacent Counties (n=1613)	6.8	13.1	36.3	19.0	20.5	3.7	0.7
Downstate Hunters (n=2228)	4.4	9.4	31.9	17.8	28.3	6.7	1.6

Homeowners were asked to indicate how they would like to see deer populations change in the county they live in during the next 5 years. Nearly half of homeowner respondents (44.4%) indicated they would like to see “No Change” in deer populations (Table 6). Following, homeowners were also asked how they felt about deer, in general, in the area where they live; approximately one third (35.5%) responded “I like deer, regardless of the problems they cause” (Table 7). Another 21.8% indicated “I am undecided about deer,” while 30.7% indicated “4” being somewhere between the previous two answers.

Table 6. Homeowner suggested deer population changes for the next 5 years.

How would you like to see deer numbers change in the county where you live during the next 5 years?							
	Decreased Considerably %	Decreased %	Decreased Slightly %	No Change %	Increased Slightly %	Increased %	Increased Considerably %
Homeowners* (n=1561)	5.5	9.9	15.1	44.4	15.0	6.8	3.4

*Homeowners who do not hunt, nor have a member of the household that hunts.

Table 7. Homeowner attitudes about deer.

How do you feel about deer in the area where you live?					
	1 I dislike deer, because of the problems they cause %	2 %	3 I am undecided about deer %	4 %	5 I like deer, regardless of the problems they cause %
Homeowners* (n=1582)	4.9	7.1	21.8	30.7	35.5

*Homeowners who do not hunt, nor have a member of the household that hunts.

Perceived Importance of Factors Used in Setting Deer Population Goals

Survey participants were asked to provide their opinions regarding factors used to set deer populations goals in Illinois. Respondents rated each factor on a 5-point unidirectional scale (1=“Not Important,” 5=“Extremely Important”). Mean responses for each factor were analyzed across groups using one-way Analysis of Variance (ANOVA) with eta (η) to test for effect size. In each case, differences in means were significant but eta was minimal. The first factor, “Number of deer acceptable to the general public” received similar ratings among all response categories from both hunters in and adjacent to CWD counties, with highest percentages responding to the “Not Important” category (26.8% and 26.5%, respectively) (Table 8). More downstate hunters rated this factor as “Somewhat Important” (30.8%) and “Moderately Important” (28.6%), and fewer as “Very Important” (15.5%) and “Extremely Important” (3.8%) than northern Illinois deer hunters; percentage of downstate hunters rating this factor as “Extremely Important” was approximately half that of northern Illinois hunters. The most frequent response for this factor among homeowners was “Moderately Important” (34.6%); a total of 15.5% of homeowners rated this factor as “Not Important” and 19.8% as “Very Important.” The percentage of homeowners rating this factor as “Extremely Important” (7.1%) was slightly below that received from northern Illinois deer hunters from counties adjacent to CWD counties (7.6%). No response category received a majority of responses. Results of One-way Analysis of Variance (ANOVA) for comparisons of means across groups were significant ($F = 21.75, p < 0.001$), but eta statistic ($\eta = 0.096$) showed no effect size.

Table 8. Importance of number of deer acceptable to the general public in setting deer population goals for northern Illinois deer hunters, homeowners, and downstate deer hunters.

In your opinion, to what extent should the following be considered in setting deer population goals in Illinois?					
The number of deer acceptable to the general public	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1682)	26.8	23.8	25.2	15.8	8.4
Hunters in Adjacent Counties (n=1605)	26.5	22.7	26.0	17.1	7.6
Downstate Hunters (n=2234)	21.4	30.8	28.6	15.5	3.8
Homeowners* (n=1554)	15.5	23.1	34.6	19.8	7.1

*Homeowners who did not hunt, nor had a member of the household who hunted.

$F = 21.56, p < 0.001, \eta = 0.095$

Importance of using the amount of disease present in the deer herd to set population goals was rated highest among downstate hunters: 81% rated this factor as “Very Important” or “Extremely Important” (Table 9). By comparison, 69% of homeowners and hunters in adjacent counties, and 55% of deer hunters in CWD counties responded that this factor was “Very Important” or “Extremely Important.” Differences in mean response across groups was significant ($F = 90.88, p < 0.001, \eta = 0.192$), however effect size was minimal. Use of deer-vehicle collisions ranked low in importance with the highest response for “Very Important” or “Extremely Important” occurring among homeowners (53%), and lowest among downstate hunters (31%) and hunters in CWD counties (34%) (Table 10). Importance of number of deer desired by hunters in setting deer population goals was rated highest among hunters in CWD counties (46% “Very Important” or “Extremely Important”), followed by hunters in adjacent counties (44%), downstate hunters (37%), and homeowners (30%); 19% of homeowners felt this factor was “Not Important” in setting population goals (Table 11).

Table 9. Importance of amount of disease in the deer herd in setting deer population goals for northern Illinois deer hunters, homeowners, and downstate deer hunters.

In your opinion, to what extent should the following be considered in setting deer population goals in Illinois?					
The amount of disease in the deer herd	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1680)	6.7	15.7	22.6	31.6	23.3
Hunters in Adjacent Counties (n=1607)	3.5	10.1	17.1	38.0	31.4
Downstate Hunters (n=2247)	.8	4.2	13.7	46.6	34.8
Homeowners* (n=1560)	4.0	6.9	19.9	40.8	28.5

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 112.30, p < 0.001, \eta = 0.213$

Table 10. Importance of number of deer-vehicle collisions in setting deer population goals for northern Illinois deer hunters, homeowners, and downstate deer hunters.

In your opinion, to what extent should the following be considered in setting deer population goals in Illinois?					
The number of deer-vehicle collisions	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1689)	17.5	21.7	27.0	21.9	11.9
Hunters in Adjacent Counties (n=1608)	9.1	18.0	28.5	27.4	16.9
Downstate Hunters (n=2243)	8.5	27.2	33.5	20.7	10.1
Homeowners* (n=1559)	6.3	13.3	27.2	28.7	24.5

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 99.03, p < 0.001, \eta = 0.200$

Table 11. Importance of number of deer desired by hunters in setting deer population goals for northern Illinois deer hunters, homeowners, and downstate deer hunters.

In your opinion, to what extent should the following be considered in setting deer population goals in Illinois?					
The number of deer desired by hunters	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1688)	7.9	15.8	30.4	27.0	18.9
Hunters in Adjacent Counties (n=1609)	10.2	16.8	29.5	29.8	13.8
Downstate Hunters (n=2230)	8.2	20.5	34.4	27.0	9.9
Homeowners* (n=1559)	18.7	19.8	31.8	18.4	11.3

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 51.58, p < 0.001, \eta = 0.146$

More homeowners (39%), adjacent county hunters (40%), and CWD hunters (37%) reported the amount of damage deer did to agricultural crops was “Very Important” to “Extremely Important” in setting population goals compared to 23% of downstate hunters (Table 12). There was widespread agreement in using impact of deer on their natural habitat in setting deer population goals, as 58% of hunters in counties adjacent to CWD counties, 55% of hunters in CWD counties and downstate, and 49% of homeowners rated this factor as “Very Important” to “Extremely Important” (Table 13). A lower percentage of homeowners (70%) rated overall health of the deer herd “Very Important” to “Extremely Important” compared to the 3 hunter groups (Table 14). High majorities (77% of those hunting CWD counties, 83% of those in adjacent counties, and 86% of downstate deer hunters) reported their opinions that overall health of the deer herd was “Very Important” to “Extremely Important” as a factor in determining deer population goals.

Table 12. Importance of amount of damage done by deer to agricultural crops in setting deer population goals for northern Illinois deer hunters, homeowners, and downstate deer hunters.

In your opinion, to what extent should the following be considered in setting deer population goals in Illinois?					
The amount of damage done by deer to agricultural crops	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1688)	10.2	21.8	31.5	25.2	11.3
Hunters in Adjacent Counties (n=1611)	7.9	20.1	31.7	26.9	13.5
Downstate Hunters (n=2240)	12.8	31.7	33.0	15.8	6.7
Homeowners* (n=1557)	7.3	17.6	36.0	24.5	14.6

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 81.46, p < 0.001, \eta = 0.183$

Table 13. Importance of impact of deer on their natural habitat in setting deer population goals for northern Illinois deer hunters, homeowners, and downstate deer hunters.

In your opinion, to what extent should the following be considered in setting deer population goals in Illinois?					
The impact of deer on their natural habitat	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1691)	4.6	11.4	29.6	35.8	18.7
Hunters in Adjacent Counties (n=1608)	4.1	10.8	27.1	37.6	20.5
Downstate Hunters (n=2233)	2.4	13.0	29.5	38.8	16.3
Homeowners* (n=1559)	6.1	13.2	32.3	31.8	16.7

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 10.15, p < 0.001, \eta = 0.065$

Table 14. Importance of overall health of the deer herd in setting deer population goals for northern Illinois deer hunters, homeowners, and downstate deer hunters.

In your opinion, to what extent should the following be considered in setting deer population goals in Illinois?					
The overall health of the deer herd	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1703)	1.7	5.0	16.3	39.8	37.2
Hunters in Adjacent Counties (n=1620)	0.7	2.8	13.3	39.3	43.9
Downstate Hunters (n=2248)	0.8	2.9	10.3	42.0	44.0
Homeowners* (n=1559)	2.9	5.7	21.6	40.0	29.8

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 65.23, p < 0.001, \eta = 0.163$

Hunter and Homeowner Beliefs About CWD in Illinois

Survey participants were given a series of statements about CWD in Illinois and were asked to indicate their agreement on a 7-point scale (1=“Strongly Disagree,” 4=“Unsure,” 7=“Strongly Agree”). Over 50% of hunters in CWD counties (56%) agreed to some extent that “If left unchecked, CWD could spread throughout the Illinois deer herd,” whereas even larger percentages of respondents in the other categories selected “Slightly Agree,” “Agree,” or “Strongly Agree” for this statement (69% adjacent county hunters, 69% downstate, 67% homeowners) (Table 15). Inconsistent with the first statement, 50% of the hunters in CWD counties selected “Strongly Disagree,” “Disagree,” or “Slightly Disagree” that “CWD could wipe out the deer herd across Illinois,” while approximately 40% of the other participants (41% adjacent county hunters, 46% downstate hunters, and 44% of homeowners) chose “Slightly Agree,” “Agree,” or “Strongly Agree” for this statement (Table 16). A large portion (44.2%) of homeowners also indicated “Unsure.” The third statement “We should reduce the deer population in northern Illinois as much as needed to control CWD” did not exhibit an overwhelming majority with hunters in CWD counties; answers were fairly evenly spread across

all categories with the exception of “Strongly Agree” (3.4%) (Table 17). Other hunters and homeowners were in agreement with the statement; 46% of adjacent county hunters, 61% of downstate hunters, and 54% of homeowners indicated “Slightly Agree,” “Agree,” or “Strongly Agree.”

Table 15. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
If left unchecked, CWD could spread throughout the Illinois deer herd	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1688)	4.6	11.3	9.8	17.9	17.4	29.2	9.9
Hunters in Adjacent Counties (n=1605)	1.9	5.7	5.7	18.1	15.1	36.6	16.9
Downstate Hunters (n=2137)	0.9	3.8	4.7	21.9	14.0	35.6	19.0
Homeowners* (n=1353)	0.9	1.7	1.5	29.2	16.7	35.9	14.1

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 41.20, p < 0.001, \eta = 0.209$

Table 16. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
If left unchecked, CWD could wipe out the deer herd across Illinois	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1689)	16.0	22.9	10.8	23.7	9.3	12.0	5.3
Hunters in Adjacent Counties (n=1602)	7.7	15.6	10.4	25.5	13.2	18.2	9.4
Downstate Hunters (n=2134)	3.9	11.8	8.1	29.8	13.1	20.9	12.4
Homeowners* (n=1352)	1.8	5.5	4.6	44.2	13.8	20.9	9.2

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 62.24, p < 0.001, \eta = 0.254$

Table 17. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
We should reduce the deer population in northern Illinois as much as needed to control CWD	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1687)	18.2	21.0	13.2	18.3	14.5	11.4	3.4
Hunters in Adjacent Counties (n=1602)	7.1	12.3	11.7	23.3	18.0	20.6	7.1
Downstate Hunters (n=2127)	2.4	5.8	6.1	25.1	18.9	29.3	12.5
Homeowners* (n=1350)	3.6	6.7	6.6	29.5	18.8	24.2	10.7

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 145.45, p < 0.001, \eta = 0.373$

When asked whether they felt “Hunters are more effective at managing CWD than IDNR has been,” 52% hunters in CWD counties responded with “Slightly Agree,” “Agree,” or “Strongly Agree”; however all other participant groups responded “Unsure” at higher percentages (40.4% adjacent county hunters, 43.8% downstate hunters, and 57.9% homeowners) (Table 18). Survey participants indicated that they were “Unsure” if “CWD is natural and we should let it take its course in deer”; a larger proportion of homeowners (38.9%) answered this way than the categories of hunters (26.0% in CWD counties, 28.2% in adjacent counties, and 30.1% downstate) (Table 19). A higher percentage (33%) of hunters in CWD counties responded with “Slightly Agree,” “Agree,” or “Strongly Agree” that “CWD is natural” than other hunters (18% in adjacent counties, 16% downstate) and homeowners (14%) in Illinois. The majority of respondents were “Unsure” whether “IDNR is exaggerating the risk CWD-infected venison poses to your health”; 43.7% of hunters in CWD counties, 50.9% of hunters in adjacent counties, 55.6% of downstate hunters, and 61.5% of homeowners felt this way (Table 20). The second highest response category was “Disagree” with 14.6% of hunters in CWD counties, 16.8% in

adjacent counties, 18.8% downstate, and 16.2% of homeowners choosing this response; however, 12.7% of hunters in CWD counties also chose “Slightly Agree.”

Table 18. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
Hunters are more effective at managing CWD than IDNR has been	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1679)	2.5	6.4	7.7	31.3	16.1	19.8	16.2
Hunters in Adjacent Counties (n=1593)	2.9	9.4	9.2	40.4	14.6	15.6	7.8
Downstate Hunters (n=2128)	3.6	12.0	10.2	43.8	12.6	12.0	5.7
Homeowners* (n=1347)	5.3	10.8	6.3	57.9	7.0	8.5	4.3

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 39.44, p < 0.001, \eta = 0.205$

Table 19. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
CWD is natural and we should let it take its course in deer	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1683)	9.5	17.5	14.5	26.0	15.7	10.3	6.5
Hunters in Adjacent Counties (n=1593)	13.1	24.0	17.3	28.2	10.4	4.5	2.6
Downstate Hunters (n=2125)	15.5	24.7	13.5	30.1	10.0	4.1	2.1
Homeowners* (n=1346)	13.1	21.0	13.4	38.9	7.3	3.1	3.1

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 31.09, p < 0.001, \eta = 0.183$

Table 20. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
IDNR is exaggerating the risk CWD-infected venison poses to your health	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1686)	4.9	14.6	9.1	43.7	12.7	9.0	6.0
Hunters in Adjacent Counties (n=1595)	6.2	16.8	10.5	50.9	8.5	4.6	2.4
Downstate Hunters (n=2123)	5.2	18.8	8.3	55.6	6.6	3.9	1.6
Homeowners* (n=1338)	6.4	16.2	6.3	61.5	4.9	2.1	2.7

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 29.53, p < 0.001, \eta = 0.178$

Greater than 50% of participants from each group responded that they “Slightly Agree,” “Agree,” or “Strongly Agree” that “We should eliminate CWD from the deer population” (52% of hunters in CWD counties, 64% in adjacent counties, 68% downstate, and 61% of homeowners) (Table 21). Hunters from adjacent counties (42%) and downstate (43%) indicated that they “Slightly Agree” or “Agree” that “IDNR has taken the right steps to control the spread of CWD in Illinois”; a similar percentage within these groups (39.2% and 43.3%, respectively) indicated that they were “Unsure” (Table 22). A majority of homeowners responded that they were “Unsure” (67.1%). Hunters in CWD counties gave a more varied response with no category receiving a majority; “Unsure” was their most frequent response (28.9%). Hunters in northern Illinois feel that “Hunting can control CWD more effectively than sharpshooting”; 70% in CWD counties and a somewhat less frequent 49% of hunters in adjacent counties indicated that they “Slightly Agree,” “Agree,” or “Strongly Agree” with the statement (Table 23). Downstate hunters responded “Unsure” (42.2%) and “Slightly Agree,” “Agree,” or “Strongly Agree” (39%) with similar frequencies. A majority of homeowners (59.7%) indicated they were “Unsure” about this statement.

Table 21. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
We should eliminate CWD from the deer population	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1674)	6.4	8.9	8.9	23.7	20.8	21.5	9.9
Hunters in Adjacent Counties (n=1592)	2.3	5.3	5.8	22.2	20.9	29.9	13.4
Downstate Hunters (n=2120)	1.4	3.3	4.4	23.0	22.0	31.5	14.5
Homeowners* (n=1337)	1.9	3.4	4.4	29.6	20.6	27.2	12.9

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 34.37, p < 0.001, \eta = 0.192$

Table 22. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
IDNR has taken the right steps to control the spread of CWD in Illinois	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1687)	12.8	12.3	10.4	28.9	18.1	15.4	2.1
Hunters in Adjacent Counties (n=1593)	4.6	5.5	6.2	39.2	19.5	22.1	3.0
Downstate Hunters (n=2125)	1.4	3.1	4.6	43.3	20.1	23.2	4.4
Homeowners* (n=1344)	1.4	2.2	1.8	67.1	12.0	12.7	2.7

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 83.66, p < 0.001, \eta = 0.292$

Table 23. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
Hunting can control CWD more effectively than sharpshooting	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1678)	1.8	3.1	4.7	20.7	17.3	24.8	27.6
Hunters in Adjacent Counties (n=1591)	2.0	6.8	8.0	34.7	16.6	18.3	13.6
Downstate Hunters (n=2124)	2.3	8.0	8.4	42.2	14.2	16.5	8.5
Homeowners* (n=1344)	3.9	8.3	7.4	59.7	8.6	7.7	4.4

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 77.52, p < 0.001, \eta = 0.282$

Majorities among adjacent county hunters (57% indicated “Slightly Agree,” “Agree,” or “Strongly Agree”), downstate hunters (71%), and homeowners (59%) agree that “CWD must be controlled in northern Illinois even if it means having fewer deer”; conversely, hunters within CWD counties were split between agreement (41% indicated “Slightly Agree,” “Agree,” or “Strongly Agree”) and disagreement (40% indicated “Slightly Disagree,” “Disagree,” or “Strongly Disagree”) over this statement (Table 24). Approximately half of hunters outside CWD counties “Agree” or “Slightly Agree” that “CWD is a serious threat to the deer herd in Illinois” (48% adjacent county and 55% downstate) (Table 25). Hunters in CWD counties (38% “Agree” or “Slightly Agree”) responded in lower fractions of agreement due to a more varied response including higher percentages of disagreement (27% indicating “Disagree” or “Slightly Disagree”), whereas 43% of homeowners “Agree” or “Slightly Agree” with the statement with a large portion (41.9%) also indicating “Unsure.” When asked whether “CWD will spread without sharpshooting operations in northern Illinois,” participants, excluding those in CWD counties, most frequently indicated “Unsure” (38.8% adjacent county, 45.0% downstate, and 56.6% of

homeowners); hunters in CWD counties gave a mixed response with “Unsure” (24.9%) as the most frequent, followed by “Strongly Disagree” (22.3%) and “Disagree” (20.3%) (Table 26).

Table 24. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
CWD must be controlled in northern Illinois even if it means having fewer deer	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1687)	12.2	14.2	14.0	18.5	21.5	15.4	4.3
Hunters in Adjacent Counties (n=1595)	4.5	7.3	10.3	21.2	22.6	25.3	8.9
Downstate Hunters (n=2125)	1.2	3.1	4.6	20.1	22.7	34.3	14.0
Homeowners* (n=1343)	2.3	3.8	5.5	29.0	22.6	27.6	9.2

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 126.86, p < 0.001, \eta = 0.351$

Table 25. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
CWD is a serious threat to the deer herd in Illinois	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1684)	6.9	13.2	13.7	23.0	19.7	18.1	5.3
Hunters in Adjacent Counties (n=1592)	2.6	6.5	8.2	24.3	21.6	26.3	10.5
Downstate Hunters (n=2124)	1.1	3.2	4.4	23.3	21.5	33.2	13.3
Homeowners* (n=1345)	1.1	2.2	3.3	41.9	19.7	23.3	8.4

*Homeowners whom do not hunt, nor have a member of the household that hunts.

$F = 82.652, p < 0.001, \eta = 0.290$

Table 26. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
CWD will spread without sharpshooting operations in northern Illinois	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1685)	22.3	20.3	11.7	24.9	9.5	8.4	3.0
Hunters in Adjacent Counties (n=1589)	9.8	11.3	9.9	38.8	13.0	12.3	4.8
Downstate Hunters (n=2122)	5.1	7.8	7.6	45.0	13.9	15.0	5.6
Homeowners* (n=1344)	2.6	5.6	7.7	56.6	11.8	11.3	4.4

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 95.39, p < 0.001, \eta = 0.310$

Responses to the statement “IDNR’s sharpshooting program should continue until CWD is gone from the state” did not show any consensus among survey participants (Table 27). Most hunters from CWD counties (67.1%) disagreed to some extent with the statement: 36.5% “Strongly Disagree”, 20.0% “Disagree”, and 10.6% “Slightly Disagree.” Hunters in adjacent counties most frequently answered “Unsure” (29.9%) followed by “Strongly Disagree” (16.4%) and “Slightly Agree” (14.8%). Downstate hunters and homeowners also indicated “Unsure” most frequently (39.4% and 45.4%, respectively); however, the rest of the responses leaned towards agreeing with the statement; 36% of downstate hunters and 33% of homeowners indicated “Slightly Agree,” “Agree,” or “Strongly Agree.” When asked whether “IDNR’s CWD management is similar to Wisconsin DNR,” hunters in Illinois concurred that they were “Unsure”; 68.3% of CWD county hunters, 79.3% of adjacent county hunters, and 86.8% of homeowners selected this response (Table 28).

Table 27. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
IDNR's sharpshooting program should continue until CWD is gone from the state	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1618)	36.5	20.0	10.6	17.7	7.4	5.5	2.3
Hunters in Adjacent Counties (n=1544)	16.4	11.6	10.0	29.9	14.8	13.6	4.2
Downstate Hunters (n=2127)	8.0	8.4	7.8	39.4	15.0	15.6	5.7
Homeowners* (n=1542)	7.0	7.4	7.7	45.4	15.4	11.9	5.3

*Homeowners whom do not hunt, nor have a member of the household that hunts.

$F = 148.52, p < 0.001, \eta = 0.380$

Table 28. Agreement or disagreement of CWD statements by northern Illinois hunters, downstate hunters, and homeowners.

Please state how much you disagree or agree with the following statements about CWD in Illinois?							
IDNR's CWD management is similar to Wisconsin DNR	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1676)	8.0	8.2	4.9	68.3	4.3	5.3	1.1
Hunters in Adjacent Counties (n=1587)	2.7	3.3	2.9	79.3	4.9	5.3	1.6
Downstate Hunters (n=2117)	0.4	1.2	1.4	86.8	3.5	5.5	1.1

$F = 60.77, p < 0.001, \eta = 0.252$

Illinois Hunter and Homeowner Knowledge of CWD

Hunters and homeowners in Illinois were asked whether a series of statements concerning CWD was “Correct” or “Incorrect”; participants were also given the option to select “I don’t know” if they were unsure of the correctness of the statement. The initial statement, “CWD has always been present in the Illinois deer herd,” received a most frequent response of “Incorrect” solely from hunters in CWD counties (42.3%); 34.0% of this strata indicated “I don’t know,” and 23.6% indicated “Correct” (Table 29). Hunters in adjacent counties answered similarly, but a higher percentage answered “I don’t know” (44.5%); 40.0% also answered “Incorrect.” Downstate hunters and homeowners concurred with “I don’t know” (55.8% and 64.8% respectively) followed by “Incorrect” (30.8%; 27.7%). Approximately half of hunters in CWD counties (51.8%) responded that it was “Incorrect” that “CWD is found in every state” (Table 30). Adjacent county hunters indicated “Incorrect” (44.3%) and “I don’t know” (45.0%) in comparable frequencies to this statement. Homeowners and downstate hunters most frequently responded “I don’t know” (66.2% and 56.3%, respectively). No obvious majority was seen for any strata when they were asked whether “CWD is a fatal disease to every deer infected”; hunters in adjacent counties, downstate hunters and homeowners most frequently indicated “I don’t know” (41.7%, 48.9%, 61.1%, respectively), while hunters in CWD counties most frequently answered “Correct” (38.6%) to this statement (Table 31).

Table 29. Stakeholder perceptions of CWD presence in Illinois.

Please indicate if you think the following statements are correct or incorrect.			
CWD has always been present in the Illinois deer herd	Correct %	Incorrect %	I don't know %
Hunters in CWD counties (n=1705)	23.6	42.3	34.0
Hunters in Adjacent Counties (n=1631)	15.5	40.0	44.5
Downstate Hunters (n=2237)	13.4	30.8	55.8
Homeowners* (n=1598)	7.6	27.7	64.8

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 403.57, p < 0.001$, Cramer's $V = 0.168$

Table 30. Stakeholder perceptions of CWD distribution in the United States.

Please indicate if you think the following statements are correct or incorrect.			
CWD is found in every state	Correct %	Incorrect %	I don't know %
Hunters in CWD counties (n=1701)	12.5	51.8	35.6
Hunters in Adjacent Counties (n=1626)	10.8	44.3	45.0
Downstate Hunters (n=2232)	9.8	33.9	56.3
Homeowners* (n=1600)	6.0	27.8	66.2

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 364.35, p < 0.001$, Cramer's $V = 0.159$

Table 31. Stakeholder perception of the fatality of CWD in deer.

Please indicate if you think the following statements are correct or incorrect.			
CWD is a fatal disease to every deer infected	Correct %	Incorrect %	I don't know %
Hunters in CWD counties (n=1706)	38.6	28.7	32.7
Hunters in Adjacent Counties (n=1625)	36.9	21.4	41.7
Downstate Hunters (n=2224)	33.2	17.9	48.9
Homeowners* (n=1598)	25.4	13.2	61.1

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 308.87, p < 0.001$, Cramer's $V = 0.147$

For the next statement, “There is no known cure for CWD in deer,” approximately half hunters in CWD counties indicated “Correct” (53.2%) closely followed by “I don’t know” (42.3); the opposite response pattern was observed among adjacent county hunters (41.6% indicated “Correct” and 52.4% indicated “I don’t know”) (Table 32). Approximately sixty percent of downstate hunters (59.9%) and homeowners (66.9%) responded “I don’t know.” The majority of hunters believe “CWD does not exist in Illinois” was an “Incorrect” statement (89.8% in CWD counties, 78.9% in adjacent counties, and 76.9% downstate), whereas homeowners’ opinions are split between “Incorrect” (55.8%) and “I don’t know” (42.5%) (Table 33). Greater frequencies of hunters in northern Illinois (66.9% in CWD counties and 64.0% in adjacent counties) indicated it was “Correct” that “CWD was found in Wisconsin before Illinois” than downstate hunters (49.1%) and homeowners (33.6%)(Table 34). Downstate hunters (49.1%) and homeowners (64.0%) also responded with greater frequency “I don’t know” to the previous statement.

Table 32. Stakeholder perceptions about curing CWD in deer.

Please indicate if you think the following statements are correct or incorrect.			
There is no known cure for CWD in deer	Correct %	Incorrect %	I don’t know %
Hunters in CWD counties (n=1704)	53.2	4.5	42.3
Hunters in Adjacent Counties (n=1613)	41.6	6.0	52.4
Downstate Hunters (n=2226)	36.6	3.5	59.9
Homeowners* (n=1594)	30.4	2.7	66.9

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 243.13, p < 0.001$, Cramer’s $V = 0.131$

Table 33. Stakeholder perception of CWD existence in Illinois.

Please indicate if you think the following statements are correct or incorrect.			
CWD does not exist in Illinois	Correct %	Incorrect %	I don't know %
Hunters in CWD counties (n=1705)	3.3	89.8	6.9
Hunters in Adjacent Counties (n=1624)	4.6	78.9	16.6
Downstate Hunters (n=2231)	3.1	76.9	20.0
Homeowners* (n=1597)	1.7	55.8	42.5

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 379.81, p < 0.001$, Cramer's $V = 0.218$

Table 34. Stakeholder perceptions of CWD in Wisconsin.

Please indicate if you think the following statements are correct or incorrect.			
CWD was found in Wisconsin before Illinois	Correct %	Incorrect %	I don't know %
Hunters in CWD counties (n=1712)	66.9	3.7	29.4
Hunters in Adjacent Counties (n=1631)	64.0	2.8	33.2
Downstate Hunters (n=2233)	49.1	1.8	49.1
Homeowners* (n=1600)	33.6	2.4	64.0

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 515.60, p < 0.001$, Cramer's $V = 0.190$

Respondents were asked to estimate the number of deer that were tested positive for CWD in the past 10 years in Illinois. The highest frequency response for all participant categories was “Don’t know”; however, downstate hunters and homeowners indicated this response in greater percentages (60.5% and 51.7%, respectively) than hunters in CWD counties and adjacent counties (30.6% and 44.8%, respectively) (Table 35). A minority (8.1%) of hunters from the CWD counties identified the correct categorical response for the number of deer that tested positive for CWD, with fewer hunters (7.9%) from adjacent counties, downstate (5.7%), and homeowners (6.6%) identifying the correct category.

Table 35. Stakeholder perception of the number of deer statewide that have tested positive for CWD in the past 10 years in Illinois.

Number of CWD-positive deer	0 %	1-10 %	11-50 %	51- 100 %	101- 300 %	301- 500 %	501- 1,000 %	>1,000 %	Don’t Know %
Hunters in CWD Counties (n=1706)	0.2	7.4	19.0	15.1	12.5	8.1	3.9	3.1	30.6
Hunters in Adjacent Counties (n=1629)	0.3	4.2	13.9	13.0	9.6	7.9	3.5	2.8	44.8
Downstate Hunters (n=2215)	0.3	2.1	6.5	7.9	7.4	5.7	4.4	5.1	60.5
Homeowners* (n=1596)	0.1	3.8	10.8	10.6	8.6	6.6	3.9	3.9	51.7

*Homeowners who did not hunt, nor had a member of the household who hunted.

Previous Knowledge of IDNR Actions in Response to CWD

Survey participants were provided a list of management actions the IDNR has taken in response to CWD and were asked to indicate whether they knew about the action prior to receiving the survey. A majority of hunters in CWD counties (71.7%) knew about the first action, “Increased the number of deer permits available for hunting in CWD-affected counties”; approximately half of participants outside CWD counties knew of this action (53.7% in adjacent counties and 44.2% downstate) (Table 36). When asked of their knowledge of the IDNR “Conducting deer sharpshooting in known CWD areas to supplement hunting,” 79.6% of hunters in CWD counties indicated “Yes, I knew this” (Table 37). Hunters in other areas gave varied response to this action; 57.8% of hunters in adjacent counties indicated “Yes, I knew this,” compared with 38.5% of downstate hunters. A majority of hunters in Illinois indicated “Yes, I knew this” to IDNR’s action of “Testing deer harvested by hunters in CWD-affected counties” (Table 38). Hunters in or adjacent to CWD counties responded at higher percentages (94.6% and 79.1%, respectively) than downstate hunters (69.0%). Northern Illinois hunters frequently indicated “Yes, I knew this” to “Holding special CWD management hunts in CWD-affected counties” (79.2% in CWD counties and 63.0% in adjacent counties), whereas slightly more than half of downstate hunters (54.6%) responded in the same way (Table 39).

Table 36. Illinois hunter knowledge of IDNR actions in response to the presence of CWD.

Please tell us if you knew before receiving this questionnaire about the IDNR action listed below.		
IDNR Action – Increased the number of deer permits available for hunting in CWD-affected counties	Yes, I knew this %	No, I did not know this %
Hunters in CWD counties (n=1715)	71.7	28.3
Hunters in Adjacent Counties (n=1638)	53.7	46.3
Downstate Hunters (n=2231)	44.2	55.8

$\chi^2 = 299.26, p < 0.001$, Cramer's $V = 0.231$

Table 37. Illinois hunter knowledge of IDNR actions in response to the presence of CWD.

Please tell us if you knew before receiving this questionnaire about the IDNR action listed below.		
IDNR Action – Conducting deer sharpshooting in known CWD areas to supplement hunting	Yes, I knew this %	No, I did not know this %
Hunters in CWD counties (n=1713)	79.6	20.4
Hunters in Adjacent Counties (n=1634)	57.8	42.2
Downstate Hunters (n=2231)	38.5	61.5

$\chi^2 = 668.68, p < 0.001$, Cramer's $V = 0.346$

Table 38. Illinois hunter knowledge of IDNR actions in response to the presence of CWD.

Please tell us if you knew before receiving this questionnaire about the IDNR action listed below.		
IDNR Action – Testing deer harvested by hunters in CWD-affected counties.	Yes, I knew this %	No, I did not know this %
Hunters in CWD counties (n=1715)	94.6	5.4
Hunters in Adjacent Counties (n=1637)	79.1	20.9
Downstate Hunters (n=2228)	69.0	31.0

$\chi^2 = 394.76, p < 0.001$, Cramer's $V = 0.266$

Table 39. Illinois hunter knowledge of IDNR actions in response to the presence of CWD.

Please tell us if you knew before receiving this questionnaire about the IDNR action listed below.		
IDNR Action – Holding special CWD management hunts in CWD-affected counties	Yes, I knew this %	No, I did not know this. %
Hunters in CWD counties (n=1714)	79.2	20.8
Hunters in Adjacent Counties (n=1635)	63.0	37.0
Downstate Hunters (n=2226)	54.6	45.4

$\chi^2 = 260.03, p < 0.001$, Cramer's $V = 0.216$

Similar to previous actions, the IDNR management action “Testing deer from counties NOT affected by CWD” was known by fewer hunter participants downstate (51.4% marked “Yes, I knew this”) compared with participants in northern Illinois (63.7% in CWD and 58.0% in adjacent counties) (Table 40). A majority of hunters in CWD counties (78.5%) indicated “Yes, I knew this” to the IDNR action “Reduce populations of deer in CWD-affected counties”; a less frequent “Yes” response was received from adjacent county (59.7%) and downstate (48.9%) hunters (Table 41). A majority of hunters in Illinois also knew IDNR has “Banned the feeding of wild deer”; 74.9% in CWD counties, 68.0% in adjacent counties, and 66.6% downstate indicated “Yes, I knew this” (Table 42). When asked about their knowledge of IDNR “Funding research about CWD and its spread,” 63.2% of hunters in CWD counties indicated “Yes, I knew this,” but smaller percentages of those outside CWD counties responded in the same way (52.7% in adjacent counties and 46.8% downstate) (Table 43).

Table 40. Illinois hunter knowledge of IDNR actions in response to the presence of CWD.

Please tell us if you knew before receiving this questionnaire about the IDNR action listed below.		
IDNR Action – Testing deer from counties NOT affected by CWD	Yes, I knew this %	No, I did not know this. %
Hunters in CWD counties (n=1715)	63.7	36.3
Hunters in Adjacent Counties (n=1635)	58.0	42.0
Downstate Hunters (n=2228)	51.4	48.6

$\chi^2 = 60.41, p < 0.001$, Cramer's $V = 0.104$

Table 41. Illinois hunter knowledge of IDNR actions in response to the presence of CWD.

Please tell us if you knew before receiving this questionnaire about the IDNR action listed below.		
IDNR Action – Reduce populations of deer in CWD-affected counties	Yes, I knew this %	No, I did not know this. %
Hunters in CWD counties (n=1713)	78.5	21.5
Hunters in Adjacent Counties (n=1634)	59.7	40.3
Downstate Hunters (n=1557)	48.9	51.1

$\chi^2 = 139.68, p < 0.001$, Cramer's $V = 0.204$

Table 42. Illinois hunter knowledge of IDNR actions in response to the presence of CWD.

Please tell us if you knew before receiving this questionnaire about the IDNR action listed below.		
IDNR Action – Banned the feeding of wild deer	Yes, I knew this %	No, I did not know this. %
Hunters in CWD counties (n=1712)	74.9	25.1
Hunters in Adjacent Counties (n=1639)	68.0	32.0
Downstate Hunters (n=2228)	66.6	33.4

$\chi^2 = 34.31, p < 0.001$, Cramer's $V = 0.078$

Table 43. Illinois hunter knowledge of IDNR actions in response to the presence of CWD.

Please tell us if you knew before receiving this questionnaire about the IDNR action listed below.		
IDNR Action – Funding research about CWD and its spread	Yes, I knew this %	No, I did not know this. %
Hunters in CWD counties (n=1714)	63.2	36.8
Hunters in Adjacent Counties (n=1637)	52.7	47.3
Downstate Hunters (n=2224)	46.8	53.2

$\chi^2 = 105.625, p < 0.001$, Cramer's $V = 0.138$

Perceived Effectiveness of IDNR Management Actions in Reducing CWD

Survey participants, excluding homeowners, were asked to rank effectiveness of IDNR actions for reducing CWD in deer on a scale from 1="Not at All Effective" to 5="Very Effective" with 6="I am not sure". The first factor "Increased deer harvest through hunting in CWD-affected counties" did not have a general consensus among hunters in CWD-affected counties with the most frequent response being "Somewhat Effective" (24.6%); hunters in adjacent counties and downstate answered with higher frequency "I am not sure," at 32.8% and 38.5%, respectively (Table 44). Very few respondents (8.1% of hunters in CWD counties, 6.2% in adjacent counties, and 4.0% downstate) deemed using "deer sharpshooting in known CWD areas to supplement hunting" as a "Very Effective" strategy (Table 45). Along with this trend, a high percentage of hunters in CWD counties (27.1%) agreed that deer sharpshooting was "Not at all effective". Pluralities of hunters in adjacent counties (34.9%) and downstate (42.3%) responded that they were not sure.

Table 44. Perceived effectiveness of IDNR management actions for reducing CWD in Illinois among hunters.

How effective do you feel the following IDNR management actions have been in reducing CWD in deer?						
Increased deer harvest through hunting in CWD-affected counties	Not at all effective %	Slightly effective %	Somewhat effective %	Effective %	Very Effective %	I am not sure %
Hunters in CWD counties (n=1702)	11.3	17.2	24.6	22.7	8.3	15.9
Hunters in Adjacent Counties (n=1632)	5.3	11.1	24.8	20.5	5.5	32.8
Downstate Hunters (n=2220)	4.5	10.1	21.4	21.1	4.3	38.5

$\chi^2 = 320.31, p < 0.001$, Cramer's $V = 0.170$

Table 45. Perceived effectiveness of IDNR management actions for reducing CWD in Illinois among hunters.

How effective do you feel the following IDNR management actions have been in reducing CWD in deer?						
Used deer sharpshooting in known CWD areas to supplement hunting	Not at all effective %	Slightly effective %	Somewhat effective %	Effective %	Very Effective %	I am not sure %
Hunters in CWD counties (n=1695)	27.1	16.6	15.9	13.3	8.1	18.9
Hunters in Adjacent Counties (n=1624)	13.7	12.4	17.2	15.7	6.2	34.9
Downstate Hunters (n=2219)	9.9	10.8	16.8	16.3	4.0	42.3

$\chi^2 = 407.06, p < 0.001$, Cramer's $V = 0.192$

Reducing deer populations in CWD-affected counties was generally indicated as “Somewhat effective” or “Effective” among all respondents who provided an opinion; 39% of hunters in CWD counties, 42% in adjacent counties, and 39% of downstate hunters responded that reduced populations were “Somewhat effective” or “Effective” (Table 46). Similarly, a plurality of participants (43% in CWD counties and adjacent counties and 41% downstate) indicated that holding “special CWD management hunts in CWD-affected counties” were “Somewhat effective” or “Effective” (Table 47). Large percentages of hunters in adjacent

counties and downstate indicated they were unsure of how *any* of the IDNR management actions were affecting CWD reduction; 30-40% of adjacent and downstate participants indicated “I am not sure” at each of the 4 actions (Tables 44 through 47).

Table 46. Perceived effectiveness of IDNR management actions for reducing CWD in Illinois among hunters.

How effective do you feel the following IDNR management actions have been in reducing CWD in deer?						
Reduced populations of deer in CWD-affected counties	Not at all effective %	Slightly effective %	Somewhat effective %	Effective %	Very Effective %	I am not sure %
Hunters in CWD counties (n=1694)	13.6	17.5	20.6	18.8	12.6	16.9
Hunters in Adjacent Counties (n=1629)	6.9	12.5	20.6	21.2	7.1	31.7
Downstate Hunters (n=2220)	6.0	10.7	17.5	21.4	5.7	38.8

$\chi^2 = 332.34, p < 0.001$, Cramer's $V = 0.173$

Table 47. Perceived effectiveness of IDNR management actions for reducing CWD in Illinois among hunters.

How effective do you feel the following IDNR management actions have been in reducing CWD in deer?						
Held special CWD management hunts in CWD-affected counties	Not at all effective %	Slightly effective %	Somewhat effective %	Effective %	Very Effective %	I am not sure %
Hunters in CWD counties (n=1694)	10.9	17.5	21.7	21.5	10.3	18.1
Hunters in Adjacent Counties (n=1629)	6.1	10.3	20.4	22.2	9.5	31.4
Downstate Hunters (n=2217)	4.9	9.9	17.7	22.8	5.5	39.2

$\chi^2 = 287.14, p < 0.001$, Cramer's $V = 0.161$

Perceived Importance of IDNR Monitoring CWD in Illinois

Hunters in each group ranked importance of testing deer for CWD in three categories on a five-point scale from 1=“Not Important” to 5=“Extremely Important.” When asked about “Testing of deer in CWD counties to monitor local distribution and the percent of deer with the illness,” greater than 60% of respondents in all categories (61% in CWD counties, 70% in adjacent counties, and 69% of downstate hunters) indicated that it was “Very Important” or “Extremely Important” (Table 48). Similarly, participants agreed that the IDNR should test deer in non-CWD counties to determine whether CWD has spread to new areas; 58% of hunters in CWD counties, 69% in adjacent counties, and 68% of downstate hunters indicated this was “Very Important” or “Extremely Important” (Table 49). Much smaller percentages of participants indicated that testing of deer in CWD counties (6.7% of hunters in CWD counties, 2.0% in adjacent counties, 1.9% of downstate hunters) and non-CWD counties (7.3% of hunters in CWD counties, 2.6% in adjacent counties, 2.2% of downstate hunters) was “Not Important” (Tables 48, 49). When asked whether “Testing of YOUR deer so that you can decide whether you should eat it” was important, approximately half the participants felt that this was “Very Important” or “Extremely Important” (47% in CWD counties, 51% in adjacent counties, and 49% downstate) (Table 50). In comparison to other IDNR testing actions, a greater percentage indicated that testing their personal deer was “Not Important”; 20.8% of hunters in CWD counties, 13.5% of hunters in adjacent counties, and 15.6% of downstate hunters specified testing of their personal deer was “Not Important.”

Table 48. Importance of IDNR testing and monitoring CWD in Illinois for northern Illinois and downstate hunters.

IDNR annually tests thousands of deer from throughout the state to monitor where CWD is in Illinois. In your opinion, how important is this surveillance for each of the following purposes?					
Testing of deer in CWD counties to monitor local distribution and the percent of deer with the illness.	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1706)	6.7	12.8	19.6	39.1	21.8
Hunters in Adjacent Counties (n=1624)	2.0	8.1	20.0	42.5	27.3
Downstate Hunters (n=2218)	1.9	7.6	21.6	45.7	23.2

$\chi^2 = 131.58, p < 0.001$, Cramer's $V = 0.109$

Table 49. Importance of IDNR testing and monitoring CWD in Illinois for northern Illinois and downstate hunters..

IDNR annually tests thousands of deer from throughout the state to monitor where CWD is in Illinois. In your opinion, how important is this surveillance for each of the following purposes?					
Testing of deer in non-CWD counties to determine whether CWD has spread to new areas.	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1705)	7.3	14.4	19.9	38.0	20.4
Hunters in Adjacent Counties (n=1625)	2.6	8.6	20.4	40.1	28.4
Downstate Hunters (n=2220)	2.2	8.2	21.4	43.3	24.8

$\chi^2 = 146.46, p < 0.001$, Cramer's $V = 0.115$

Table 50. Importance of IDNR testing and monitoring CWD in Illinois for northern Illinois and downstate hunters.

IDNR annually tests thousands of deer from throughout the state to monitor where CWD is in Illinois. In your opinion, how important is this surveillance for each of the following purposes?					
Testing of YOUR deer so that you can decide whether you should eat it.	Not Important %	Somewhat Important %	Moderately Important %	Very Important %	Extremely Important %
Hunters in CWD counties (n=1707)	20.8	13.8	18.1	23.4	23.9
Hunters in Adjacent Counties (n=1621)	13.5	15.5	20.2	23.8	27.0
Downstate Hunters (n=2215)	15.6	15.8	20.1	26.7	21.9

$\chi^2 = 49.61, p < 0.001$, Cramer's $V = 0.067$

Preferred Level of Action for IDNR to Pursue to Control CWD

Hunter participants were asked to give their opinion on the level the IDNR could take upon six particular actions to control CWD affected areas. Answers were categorized on a scale from 1 to 4 with 1=“Stop this action,” 2=“Go slower with this action,” 3=“Continue with this action,” and 4=“Increase the level of this action.” Table 51 illustrates a majority in each hunter participant group responded to “Continue with this action” for the first factor, “Increase deer harvest through hunting in CWD-affected counties” (47.8% in CWD counties, 58.9% in adjacent counties, 63.1% downstate). The next factor, “Use deer sharpshooting in know CWD areas to supplement hunting,” did not show unanimity as the first factor did; over 50% of hunters in CWD counties (56.9%) felt that this action should be stopped, whereas hunters in adjacent counties (38.7%) and downstate hunters(44.8%) felt that IDNR should “Continue with this action” (Table 52). By comparison, 27.9% of hunters in adjacent counties and 20.5% of downstate hunters felt sharpshooting should be stopped. For the action “Testing deer harvested by hunters in CWD-affected counties” a high majority of respondents in all hunter subgroups felt that IDNR should “Continue with this action” (69.4% in CWD counties, 67.1% in adjacent counties, 71.2% downstate); the next highest majority indicated that IDNR should “Increase the level of this action,” 19.3% in CWD counties, 26.3% in adjacent counties, and 22.3% downstate (Table 53).

Table 51. Preferred method of action for IDNR to control CWD in Illinois for hunters in CWD-affected areas, adjacent counties, and downstate regions.

In your opinion, to what level do you think IDNR should pursue the actions listed below?				
Increase deer harvest through hunting in CWD-affected counties	Stop this action %	Go slower with this action %	Continue with this action %	Increase the level of this action %
Hunters in CWD counties (n=1706)	9.6	22.5	47.8	20.2
Hunters in Adjacent Counties (n=1616)	4.5	17.9	58.9	18.7
Downstate Hunters (n=2188)	3.7	18.6	63.1	14.6

$\chi^2 = 133.69, p < 0.001$, Cramer's $V = 0.110$

Table 52. Preferred method of action for IDNR to control CWD in Illinois for hunters in CWD-affected areas, adjacent counties, and downstate regions.

In your opinion, to what level do you think IDNR should pursue the actions listed below?				
Use deer sharpshooting in known CWD areas to supplement hunting	Stop this action %	Go slower with this action %	Continue with this action %	Increase the level of this action %
Hunters in CWD counties (n=1704)	56.9	21.4	17.7	4.1
Hunters in Adjacent Counties (n=1611)	27.9	24.0	38.7	9.3
Downstate Hunters (n=2177)	20.5	25.1	44.8	9.6

$\chi^2 = 659.64, p < 0.001$, Cramer's $V = 0.245$

Table 53. Preferred method of action for IDNR to control CWD in Illinois for hunters in CWD-affected areas, adjacent counties, and downstate regions.

In your opinion, to what level do you think IDNR should pursue the actions listed below?				
Testing deer harvested by hunters in CWD-affected counties	Stop this action %	Go slower with this action %	Continue with this action %	Increase the level of this action %
Hunters in CWD counties (n=1707)	3.6	7.6	69.4	19.3
Hunters in Adjacent Counties (n=1619)	1.0	5.6	67.1	26.3
Downstate Hunters (n=2195)	1.2	5.3	71.2	22.3

$\chi^2 = 68.58, p < 0.001$, Cramer's $V = 0.111$

A majority of survey participants across the three hunter strata agreed that “Holding special CWD management hunts in CWD-affected counties” was beneficial; 72% of hunters in CWD counties, 82% of hunters in adjacent counties, and 84% of downstate hunters felt that IDNR should “Continue with this action” or “Increase the level of this action” (Table 54). Approximately half of adjacent county hunters and downstate hunters felt that IDNR should “Reduce populations of deer in CWD-affected counties” (49.6% and 56.5%, respectively, selected “Continue with this action”); however, for hunters in CWD counties, no response category received a majority of responses (35.7% responded “Go slower with this action,” 33.3% with “Continue this action,” and 22.3% with “Stop this action”) (Table 55). The management action “Testing deer harvested by hunters from counties NOT affected by CWD,” received similar support from majorities in each hunter group; most hunters in CWD counties (62.0%), adjacent counties (64.3%), and downstate (66.2%) agreed that IDNR should “Continue with this action” (Table 56).

Table 54. Preferred method of action for IDNR to control CWD in Illinois for hunters in CWD-affected areas, adjacent counties, and downstate regions.

In your opinion, to what level do you think IDNR should pursue the actions listed below?				
Holding special CWD management hunts in CWD-affected counties	Stop this action %	Go slower with this action %	Continue with this action %	Increase the level of this action %
Hunters in CWD counties (n=1701)	10.9	17.5	53.7	17.9
Hunters in Adjacent Counties (n=1604)	5.0	12.9	60.7	21.4
Downstate Hunters (n=2180)	3.3	12.9	67.2	16.6

$\chi^2 = 150.01, p < 0.001$, Cramer's $V = 0.117$

Table 55. Preferred method of action for IDNR to control CWD in Illinois for hunters in CWD-affected areas, adjacent counties, and downstate regions.

In your opinion, to what level do you think IDNR should pursue the actions listed below?				
Reduce populations of deer in CWD-affected counties	Stop this action %	Go slower with this action %	Continue with this action %	Increase the level of this action %
Hunters in CWD counties (n=1696)	22.3	35.7	33.3	8.6
Hunters in Adjacent Counties (n=1605)	8.2	25.7	49.6	16.4
Downstate Hunters (n=2177)	5.3	24.6	56.5	13.6

$\chi^2 = 460.82, p < 0.001$, Cramer's $V = 0.205$

Table 56. Preferred method of action for IDNR to control CWD in Illinois for hunters in CWD-affected areas, adjacent counties, and downstate regions.

In your opinion, to what level do you think IDNR should pursue the actions listed below?				
Testing deer harvested by hunters from counties NOT affected by CWD	Stop this action %	Go slower with this action %	Continue with this action %	Increase the level of this action %
Hunters in CWD counties (n=1706)	7.5	16.2	62.0	14.2
Hunters in Adjacent Counties (n=1615)	3.7	14.3	64.3	17.7
Downstate Hunters (n=2192)	3.7	13.6	66.2	16.4

$\chi^2 = 48.4, p < 0.001$, Cramer's $V = 0.066$

Preferred IDNR action for controlling CWD and maintaining deer populations

Survey participants were asked to choose the response that best matched their preference for three questions about deer management in northern Illinois. A majority (66.6%) of hunters in CWD counties indicated “I favor ending IDNR sharpshooting with a higher likelihood of CWD spreading to more counties,” whereas hunters in adjacent counties (62.7%) and downstate (74.5%) indicated “I favor continuing IDNR sharpshooting to reduce the likelihood of CWD spreading to more counties” (Table 57). When asked their preference for the amount of deer in

the area versus odds of encountering deer with CWD, a majority of downstate hunters (71.1%) responded “I prefer *fewer* deer in the areas I hunt to have a lower chance of shooting a deer with CWD”; conversely, 64.7% of hunters in CWD counties “prefer *more* deer in the areas I hunt, even if it means a greater chance of shooting a deer with CWD” (Table 58). Hunters in adjacent counties responded with a mixed opinion with approximately half (44.5% chose a greater chance of CWD, 55.5% chose a lower chance of CWD) responding to each category. Correspondingly, hunters in CWD counties (68.6%) favored “Having a higher population of deer in Northern Illinois is better than sharpshooting deer to control the spread of CWD,” whereas a strong majority of downstate hunters (75.2%) favor the opposite response, “Continued sharpshooting to reduce the population of deer in Northern Illinois is better than having CWD spread” (Table 59). Over half (59.5%) of adjacent county hunters answered “Continued sharpshooting to reduce the population of deer in Northern Illinois is better than having CWD spread.”

Table 57. Illinois hunter response to choices of deer population and CWD management.

	I favor ending IDNR sharpshooting with a higher likelihood of CWD spreading to more counties %	I favor continuing IDNR sharpshooting to reduce the likelihood of CWD spreading to more counties %
Hunters in CWD counties (n=1654)	66.6	33.4
Hunters in Adjacent Counties (n=1581)	37.3	62.7
Downstate Hunters (n=2120)	25.5	74.5

Table 58. Illinois hunter response to choices of deer population and CWD management.

	I prefer more deer in the areas I hunt, even if it means a greater chance of shooting a deer with CWD %	I prefer fewer deer in the areas I hunt to have a lower chance of shooting a deer with CWD %
Hunters in CWD counties (n=1670)	64.7	35.3
Hunters in Adjacent Counties (n=1577)	44.5	55.5
Downstate Hunters (n=2121)	28.9	71.1

Table 59. Illinois hunter response to choices of deer population and CWD management.

	Having a higher population of deer in Northern Illinois is better than sharpshooting deer to control the spread of CWD %	Continued sharpshooting to reduce the population of deer in Northern Illinois is better than having CWD spread %
Hunters in CWD counties (n=1652)	68.6	31.4
Hunters in Adjacent Counties (n=1565)	40.5	59.5
Downstate Hunters (n=2105)	24.8	75.2

Perceived Trust in IDNR for Managing CWD

Survey participants answered a series of 11 questions beginning with “I trust IDNR to...” by rating the questions on a scale of agreement or disagreement. Participants in all strata responded to the first statement, “Provide me with enough information to decide what actions I should take regarding CWD,” with “Agree” being the most frequent response (38.3% for CWD counties, 41.5% for adjacent counties, 41.3% for downstate, 32.3% for homeowners); a similar amount of homeowners (30.1%) also responded “Unsure” to this statement (Table 60). For the second statement a large majority of respondents indicated that they trust IDNR to “Provide the best available information on CWD in Illinois” with greater than 60% of each participant

subgroup responding “Slightly Agree,” “Agree,” or “Strongly Agree”; 70% of CWD county, 73% of adjacent county and downstate hunters, and 63% of homeowners chose this response (Table 61). Hunters and homeowners in Illinois agreed that IDNR will “Make good management decisions regarding CWD issues”; 29.5% of hunters in CWD counties, 39.0% of hunters in adjacent counties, 43.0% of downstate hunters, and 37.4% of homeowners indicated “Agree” on the survey (Table 62).

Table 60. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Provide me with enough information to decide what actions I should take regarding CWD	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1702)	4.9	7.3	7.9	14.1	17.9	38.3	9.6
Hunters in Adjacent Counties (n=1621)	2.7	6.2	6.8	14.8	16.5	41.5	11.6
Downstate Hunters (n=2143)	2.3	4.9	5.5	18.8	18.2	41.3	9.0
Homeowners* (n=1327)	2.6	5.4	5.6	30.1	18.1	32.3	5.8

*Homeowners who do not hunt, nor have a member of the household that hunts.
 $F = 9.73, p < 0.001, \eta = 0.098$

Table 61. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Provide the best available information on CWD in Illinois	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1705)	4.2	6.6	6.8	12.7	18.6	40.4	10.8
Hunters in Adjacent Counties (n=1619)	2.3	5.3	6.2	13.2	16.1	44.2	12.8
Downstate Hunters (n=2143)	1.7	4.1	6.1	15.6	18.2	44.8	9.5
Homeowners* (n=1324)	1.9	4.1	3.5	27.8	17.8	37.7	7.2

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 7.58, p < 0.001, \eta = 0.091$

Table 62. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Make good deer management decisions regarding CWD issues	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1696)	8.6	9.8	9.6	17.2	16.0	29.5	9.3
Hunters in Adjacent Counties (n=1609)	3.4	5.7	7.0	15.4	17.7	39.0	11.9
Downstate Hunters (n=2127)	2.4	3.6	6.2	18.1	17.2	43.0	9.4
Homeowners* (n=1328)	1.9	2.9	3.3	28.4	18.1	37.4	8.1

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 33.41, p < 0.001, \eta = 0.189$

When asked whether they trusted IDNR to “Provide adequate opportunities to listen to hunters’ concerns about CWD,” over half of hunters and homeowners in Illinois indicated “Slightly Agree,” “Agree,” or “Strongly Agree” (56% of hunters in CWD counties and homeowners, along with 66% of hunters in adjacent counties and downstate hunters); one-third of homeowners (34%) were “Unsure” of this action (Table 63). The majority of survey respondents across all four strata selected “Agree” or “Slightly Agree” that IDNR will “Provide timely information regarding CWD issues” (51% of hunters in CWD counties, 57% in adjacent counties, 58% downstate, and 51% of homeowners) (Table 64). As with responses to other trust statements, approximately one-third of homeowners (32%) were “Unsure.” Nearly 40% of all respondents “Agree” that IDNR will “Provide truthful information about human safety issues related to CWD”; this pertained to 37.2% of hunters in CWD counties, 39.9% in adjacent counties, 42.1% of downstate hunters, and 35.9% of homeowners (Table 65).

Table 63. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Provide adequate opportunities to listen to hunters’ concerns about CWD	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1696)	7.5	10.0	9.4	17.0	15.9	27.8	12.4
Hunters in Adjacent Counties (n=1614)	2.9	6.3	7.2	17.7	15.4	36.8	13.7
Downstate Hunters (n=2141)	2.5	4.1	6.5	20.7	15.9	39.5	10.8
Homeowners* (n=1325)	2.0	3.0	4.8	33.9	16.3	32.0	8.1

*Homeowners who do not hunt, nor have a member of the household that hunts.
 $F = 26.92, p < 0.001, \eta = 0.170$

Table 64. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Provide timely information regarding CWD issues	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1702)	3.8	6.2	9.3	19.0	18.2	32.3	9.2
Hunters in Adjacent Counties (n=1612)	2.0	4.9	6.9	17.6	19.0	37.9	11.7
Downstate Hunters (n=2138)	1.6	3.8	6.7	20.5	18.1	40.3	9.0
Homeowners* (n=1322)	1.7	3.9	4.8	31.8	17.1	34.0	6.7

*Homeowners who do not hunt, nor have a member of the household that hunts.
 $F = 7.94, p < 0.001, \eta = 0.093$

Table 65. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Provide truthful information about human safety issues related to CWD	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1701)	4.4	5.2	6.3	17.3	14.4	37.2	15.2
Hunters in Adjacent Counties (n=1615)	2.2	4.0	5.2	15.6	14.6	39.9	18.5
Downstate Hunters (n=2139)	1.5	2.9	4.3	17.9	17.2	42.1	14.2
Homeowners* (n=1323)	2.0	2.6	3.3	27.4	16.6	35.9	12.2

*Homeowners who did not hunt, nor have a member of the household who hunted.
 $F = 10.31, p < 0.001, \eta = 0.106$

Survey participants answered most frequently that they “Agree” they trusted IDNR to “Provide truthful information about deer population estimates” (34.5% in CWD counties, 37.7% in adjacent counties, 43.3% downstate, and 39.9% of homeowners) (Table 66). The second-most frequent response varied and showed no majority by study group. Similarly, participants also “Agree” that IDNR will “Provide truthful information about how CWD spreads” (39.5% in CWD counties, 41.6% in adjacent counties, 44.9% downstate, and 40.1% of homeowners), but again, results did not indicate a uniform second-most frequent response for the other agreement categories across the participant strata (Table 67). Roughly 75% of hunters in Illinois “Slightly Agree,” “Agree,” or “Strongly Agree” that IDNR will “Provide truthful information on the number of CWD-positive deer discovered in Illinois” (75% in CWD counties, 78% in adjacent counties, 76% downstate), while fewer (68%) homeowners indicated the same response (Table 68). Approximately one-quarter of homeowners responded that they were “Unsure” in each of these categories (25.2%, 24.7%, 26.5% for Tables 66-68 respectively).

Table 66. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Provide truthful information about deer population estimates	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1699)	6.4	7.7	8.1	14.5	14.4	34.5	14.4
Hunters in Adjacent Counties (n=1616)	3.5	5.4	6.2	14.1	15.0	37.7	17.9
Downstate Hunters (n=2135)	3.0	4.0	6.1	16.3	15.1	43.3	12.1
Homeowners* (n=1327)	1.7	2.3	3.4	25.2	17.0	39.9	10.5

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 13.24, p < 0.001, \eta = 0.120$

Table 67. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Provide truthful information about how CWD spreads	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1697)	4.4	4.1	5.7	13.6	17.6	39.5	15.1
Hunters in Adjacent Counties (n=1612)	1.9	4.0	4.3	14.1	15.7	41.6	18.5
Downstate Hunters (n=2135)	1.3	2.3	4.4	16.8	16.6	44.9	13.8
Homeowners* (n=1324)	1.5	1.8	2.6	24.7	16.8	40.1	12.5

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 10.77, p < 0.001, \eta = 0.108$

Table 68. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Provide truthful information on the number of CWD-positive deer discovered in Illinois	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1705)	4.7	3.5	5.1	12.0	15.0	42.3	17.4
Hunters in Adjacent Counties (n=1617)	1.5	3.6	3.8	13.5	13.9	42.6	21.1
Downstate Hunters (n=2133)	1.5	2.4	3.8	16.3	16.5	44.1	15.4
Homeowners* (n=1320)	1.7	1.7	2.5	26.5	14.6	39.5	13.4

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 10.22, p < 0.001, \eta = 0.106$

More than one-third of participants “Agree” that IDNR will “Follow the best available science in managing CWD” (33.1% in CWD counties, 39.2% in adjacent counties, 41.8% downstate, 37.3% of homeowners); around 20% of participants responded that they are “Unsure” of their trust in this action (19.6% in CWD counties, 17.3% in adjacent counties, 19.1%

downstate, 29.0% of homeowners) (Table 69). There was a general consensus among hunters in adjacent counties, downstate hunters, and homeowners in agreement that IDNR will “Properly address CWD in Illinois” (37.0%, 41.7%, 37.4% “Agree,” respectively); however, hunters in CWD counties “Agree” less (30.9%), and their tendency to “Strongly Disagree,” “Disagree,” or “Slightly Disagree” is much greater (22%) than that of hunters in adjacent counties (12%), downstate (9%), and homeowners (6%) (Table 70).

Table 69. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Follow the best available science in managing CWD	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1703)	5.9	5.5	6.6	19.6	15.7	33.1	13.6
Hunters in Adjacent Counties (n=1616)	2.8	3.9	5.0	17.3	14.2	39.2	17.5
Downstate Hunters (n=2130)	1.7	2.9	3.4	19.1	17.0	41.8	14.0
Homeowners* (n=1322)	1.6	2.0	2.7	29.0	14.6	37.3	12.8

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 17.36, p < 0.001, \eta = 0.137$

Table 70. Northern Illinois hunter, downstate hunter, and homeowner trust ratings of IDNR actions for managing and providing information about CWD.

To what extent do you disagree or agree with each of the following statements regarding your trust in IDNR?							
Properly address CWD in Illinois	Strongly Disagree %	Disagree %	Slightly Disagree %	Unsure %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1703)	7.3	7.0	7.5	17.8	17.0	30.9	12.4
Hunters in Adjacent Counties (n=1617)	2.8	4.5	5.1	18.1	14.8	37.0	17.7
Downstate Hunters (n=2130)	1.6	2.8	4.3	18.5	16.9	41.7	14.1
Homeowners* (n=1319)	1.8	1.5	3.1	29.8	14.5	37.4	11.9

*Homeowners who do not hunt, nor have a member of the household that hunts.

$F = 27.59, p < 0.001, \eta = 0.172$

Acceptance Levels from IDNR Management Actions and Potential Outcomes

Survey participants were asked whether IDNR management actions and the potential outcomes of these actions would be acceptable or unacceptable; respondents were also given the option to state that they were "Unsure." The first management action, "Increase deer harvest through hunting in CWD-affected counties," was generally considered "Somewhat Acceptable" or "Completely Acceptable" by greater than 60% of each hunter strata, with hunters in CWD counties and downstate hunters responding at 67% and hunters in adjacent counties at 69% (Table 71). Northern Illinois hunters were asked how acceptable it would be to "Slightly decrease deer harvest through hunting in CWD-affected counties," and a plurality of hunters in CWD (26.3%) and adjacent (31.7%) counties indicated they were "Unsure"; about the same percentage (26.2%) of hunters in CWD counties and slightly fewer hunters in adjacent counties (26.4%) answered that it was "Somewhat Unacceptable," while 22.4% of hunters in CWD counties answered it was "Completely Unacceptable" (Table 72). The action "Significantly decrease deer harvest through hunting in CWD-affected counties" was viewed most often as "Completely Unacceptable" by northern Illinois hunters (41.1% of CWD county hunters and 30.9% of adjacent county hunters); 28.8% of adjacent county hunters indicated that they were "Unsure" (Table 73).

Table 71. Level of hunter acceptance for IDNR management actions and potential outcomes from those actions.

Rate your level of acceptance for each of the following management actions and potential outcomes.					
Increase deer harvest through hunting in CWD-affected counties	Completely Unacceptable %	Somewhat Unacceptable %	Unsure %	Somewhat Acceptable %	Completely Acceptable %
Hunters in CWD counties (n=1700)	7.6	10.7	14.5	33.8	33.4
Hunters in Adjacent Counties (n=1617)	3.3	8.8	19.3	34.3	34.2
Downstate Hunters (n= 2203)	3.2	7.9	22.3	31.1	35.6

$\chi^2 = 93.15, p < 0.001$, Cramer's $V = 0.092$

Table 72. Level of hunter acceptance for IDNR management actions and potential outcomes from those actions.

Rate your level of acceptance for each of the following management actions and potential outcomes.					
Slightly decrease deer harvest through hunting in CWD-affected counties	Completely Unacceptable %	Somewhat Unacceptable %	Unsure %	Somewhat Acceptable %	Completely Acceptable %
Hunters in CWD counties (n=1693)	22.4	26.2	26.3	18.5	6.7
Hunters in Adjacent Counties (n=1612)	18.2	26.4	31.7	17.8	6.0

$\chi^2 = 16.47, p < 0.01$, Cramer's $V = 0.071$

Table 73. Level of hunter acceptance for IDNR management actions and potential outcomes from those actions.

Rate your level of acceptance for each of the following management actions and potential outcomes.					
Significantly decrease deer harvest through hunting in CWD-affected counties	Completely Unacceptable %	Somewhat Unacceptable %	Unsure %	Somewhat Acceptable %	Completely Acceptable %
Hunters in CWD counties (n=1680)	41.1	21.7	21.2	11.7	4.2
Hunters in Adjacent Counties (n=1610)	30.9	21.7	28.8	12.5	6.0

$\chi^2 = 47.63, p < 0.001$, Cramer's $V = 0.120$

Using “deer sharpshooting in known CWD areas to supplement hunting” was deemed “Completely Unacceptable” by 52.8% of hunters in CWD counties (Table 74). In adjacent counties, hunters’ responses showed no majority for a single response category; 27.6% felt it was “Completely Unacceptable,” 23.6% “Somewhat Acceptable,” and 19.8% were “Unsure.”

Downstate hunters felt that sharpshooting was acceptable to some extent: 49% said it was “Somewhat Acceptable” or “Completely Acceptable,” whereas 22.5% were “Unsure.” The majority of hunters in Illinois (67% in CWD counties, 71% in adjacent counties, and 73% downstate) indicated that “Holding special CWD management hunts in CWD-affected counties” was “Somewhat Acceptable” or “Completely Acceptable” (Table 75). Likewise, a large majority of hunters in Illinois (69% of CWD hunters, 75% of adjacent hunters, and 76% of downstate hunters) felt it is “Completely Unacceptable” or “Somewhat Unacceptable” to “Take no action to manage CWD” (Table 76).

Table 74. Level of hunter acceptance for IDNR management actions and potential outcomes from those actions.

Rate your level of acceptance for each of the following management actions and potential outcomes.					
Use deer sharpshooting in known CWD areas to supplement hunting	Completely Unacceptable %	Somewhat Unacceptable %	Unsure %	Somewhat Acceptable %	Completely Acceptable %
Hunters in CWD counties (n=1700)	52.8	15.1	11.6	14.2	6.3
Hunters in Adjacent Counties (n=1609)	27.6	13.0	19.8	23.6	16.0
Downstate Hunters (n=2200)	17.1	11.8	22.5	25.2	23.5

$\chi^2 = 710.36, p < 0.001$, Cramer's $V = 0.254$

Table 75. Level of hunter acceptance for IDNR management actions and potential outcomes from those actions.

Rate your level of acceptance for each of the following management actions and potential outcomes.					
Holding special CWD management hunts in CWD-affected counties	Completely Unacceptable %	Somewhat Unacceptable %	Unsure %	Somewhat Acceptable %	Completely Acceptable %
Hunters in CWD counties (n=1688)	9.6	11.4	11.8	38.4	28.7
Hunters in Adjacent Counties (n=1610)	4.2	8.1	17.1	36.1	34.5
Downstate Hunters (n=2199)	3.3	7.4	16.8	33.9	38.7

$\chi^2 = 148.74, p < 0.001$, Cramer's $V = 0.116$

Table 76. Level of hunter acceptance for IDNR management actions and potential outcomes from those actions.

Rate your level of acceptance for each of the following management actions and potential outcomes.					
Take no action to manage CWD	Completely Unacceptable %	Somewhat Unacceptable %	Unsure %	Somewhat Acceptable %	Completely Acceptable %
Hunters in CWD counties (n=1696)	53.1	15.6	15.3	10.1	5.9
Hunters in Adjacent Counties (n=1607)	64.1	11.3	15.7	5.5	3.4
Downstate Hunters (n=2198)	61.1	14.7	15.3	4.5	4.6

$\chi^2 = 92.22, p < 0.001$, Cramer's $V = 0.116$

When asked about possible outcomes of IDNR management actions, specifically “Reduced populations of deer in CWD-affected counties,” the most frequent response from northern Illinois hunters (31.7% in CWD and 35.4% in adjacent counties) was that it was “Somewhat Acceptable” (Table 77). Half of hunters in CWD counties (50%) felt it was “Completely Unacceptable” or “Somewhat Unacceptable” to see “fewer deer because of CWD management” (Table 78). Whereas, adjacent county hunters felt that “seeing fewer deer” was “Somewhat Acceptable” (30.0%), or they were “Unsure” (27.9%) of this outcome. Downstate hunters indicated that “seeing *slightly* fewer deer because of CWD management” was “Somewhat Acceptable” (32.6%) or that they were “Unsure” (26.4%); however, “seeing *significantly* fewer deer because of CWD management” caused downstate hunters to respond that they were “Unsure” (26.4%), followed by “Somewhat Acceptable” (23.9%) or “Somewhat Unacceptable” (22.8%). Approximately half of northern Illinois deer hunters (59% of hunters in CWD counties and 48% of hunters in adjacent counties) felt it was “Completely Unacceptable” or “Somewhat Unacceptable” to have “Decreased hunter harvests of deer in CWD-affected counties”; the most frequent response from downstate hunters for this outcome was “Unsure”

(30.5%) followed by “Somewhat Acceptable” (22.6%) and “Somewhat Unacceptable” (20.2%) (Table 79).

Table 77. Level of hunter acceptance for IDNR management actions and potential outcomes from those actions.

Rate your level of acceptance for each of the following management actions and potential outcomes.					
Reduced populations of deer in CWD-affected counties	Completely Unacceptable %	Somewhat Unacceptable %	Unsure %	Somewhat Acceptable %	Completely Acceptable %
Hunters in CWD counties (n=1685)	19.2	21.4	16.3	31.7	11.5
Hunters in Adjacent Counties (n=1594)	8.2	14.5	19.6	35.4	22.3

Table 78. Level of hunter acceptance for IDNR management actions and potential outcomes from those actions.

Rate your level of acceptance for each of the following management actions and potential outcomes.					
Seeing fewer deer because of CWD management	Completely Unacceptable %	Somewhat Unacceptable %	Unsure %	Somewhat Acceptable %	Completely Acceptable %
Hunters in CWD counties (n=1684)	25.8	23.9	20.2	21.7	8.4
Hunters in Adjacent Counties (n=1589)	12.8	15.7	27.9	30.0	13.6
Seeing <u>slightly</u> fewer deer because of CWD management					
Downstate Hunters (n=2180)	6.6	14.8	26.4	32.6	19.6
Seeing <u>significantly</u> fewer deer because of CWD management					
Downstate Hunters (n=2182)	16.8	22.8	26.4	23.9	10.2

Table 79. Level of hunter acceptance for IDNR management actions and potential outcomes from those actions.

Rate your level of acceptance for each of the following management actions and potential outcomes.					
Decreased hunter harvests of deer in CWD-affected counties	Completely Unacceptable %	Somewhat Unacceptable %	Unsure %	Somewhat Acceptable %	Completely Acceptable %
Hunters in CWD counties (n=1686)	34.2	25.0	18.9	16.1	5.8
Hunters in Adjacent Counties (n=1594)	25.7	22.3	24.5	19.4	8.1
Downstate Hunters (n=2184)	16.4	20.2	30.5	22.6	10.3

Preferred Strategies for IDNR Management of CWD

Hunter participants were asked to select one of five strategies they felt was most important for the IDNR to take for managing CWD in deer in Illinois (Table 80). A majority (51.9%) of deer hunters from the CWD counties felt “Using existing hunting seasons alone to manage CWD” was the best strategy. By comparison, majorities of hunters in adjacent counties (50.3%) and downstate (60.7%) favored “Use all methods necessary to manage CWD” as the most important strategy.

Table 80. Hunter preferences for IDNR strategies to manage CWD in Illinois.

Which of the following strategies do you feel is the most important for IDNR to take in managing CWD in deer in Illinois?					
	Monitor CWD distribution and rate of infection, but take no action to manage it %	Use existing hunting seasons alone to manage CWD %	Use all methods necessary to manage CWD %	Take no action and let nature take its course %	I am not sure %
Hunters in CWD Counties (n=1665)	4.6	51.9	27.7	7.1	8.7
Hunters in Adjacent Counties (n=1598)	4.1	31.0	50.3	3.4	11.2
Downstate Hunters (n=2159)	2.6	18.2	60.7	4.0	14.5

$\chi^2 = 615.81, p < 0.001$, Cramer's $V = 0.238$

Preferred Amount of Resources IDNR Committed to CWD

Illinois hunters were asked their opinion of the amount of IDNR resources used to control the spread of CWD. The most frequent response for each hunter group was “I am not sure”; 35.4% of CWD county, 43.6% of adjacent county, and 44.1% of downstate hunters chose this response. Other responses from hunters in CWD counties fell between “They currently commit just the right amount of resources” (25.8%) and “They should commit fewer resources” (24.4%), whereas hunters in adjacent counties and downstate responded “They should commit more resources” (23.1% adjacent, 26.8% downstate) and “They currently commit just the right amount of resources” (23.8%, 23.3%) (Table 81).

Table 81. Hunter opinions regarding IDNR resources used to manage CWD in Illinois.

Opinion on the amount of resources (time/money/personnel) the IDNR should commit toward controlling the spread of Chronic Wasting Disease				
	They should commit more resources %	They should commit fewer resources %	They currently commit just the right amount of resources %	I am not sure %
Hunters in CWD Counties (n=1697)	14.4	24.4	25.8	35.4
Hunters in Adjacent Counties (n=1621)	23.1	9.4	23.8	43.6
Downstate Hunters (n=2179)	26.8	5.9	23.3	44.1

$\chi^2 = 368.64, p < 0.001$, Cramer's $V = 0.183$

Perceived Aggressiveness of IDNR's Approach to Control CWD

Survey participants were asked their opinion of IDNR's approach to control the deer herd on a 4-point scale of “Not aggressive enough,” “About right,” “Too aggressive,” and “I am not sure.” Hunters in CWD counties did not have a clear majority for responses; 40.6% felt the approach is “Too aggressive,” 32.1% felt it's “About right,” and 23.4% indicated “I am not sure” (Table 82). Hunters in adjacent counties (39.4%), downstate (45.1%), and homeowners (74.5%)

most frequently indicated “I am not sure,” however, 35.6% of adjacent county hunters and 37.5% of downstate hunters also felt IDNR’s aggressiveness is “About right.”

Table 82. Illinois hunter and homeowner perceived aggressiveness of IDNR’s approach to controlling CWD in the deer herd.

IDNR’s approach to control CWD in the deer herd has been..?				
	Not aggressive enough %	About right %	Too aggressive %	I am not sure %
Hunters in CWD Counties (n=1706)	3.9	32.1	40.6	23.4
Hunters in Adjacent Counties (n=1619)	9.1	35.6	15.8	39.4
Downstate Hunters (n=2188)	10.2	37.5	7.2	45.1
Homeowners* (n=1360)	7.0	14.0	4.6	74.5

*Homeowners who do not hunt, nor have a member of the household who hunts.

$\chi^2 = 740.97$, $p < 0.001$, Cramer’s $V = 0.259$

Perceived Effectiveness of Sharpshooting to Control CWD in Illinois

Illinois hunter participants were asked their opinion of the sharpshooting program to control the spread of CWD. Half of hunters in CWD counties (50.1%) indicated “I feel it should be eliminated,” and one quarter (25.4%) of the same subgroup felt “it should stay the same” (Table 83). Hunters in adjacent counties most frequently responded “I feel it should stay the same” (42.6%) with the second- most frequent response being “I feel it should be eliminated” (25.6%). Half of the downstate hunters felt the sharpshooting program “should stay the same” (50.9%) with one quarter (24.5%) of those respondents indicating “it should be increased.”

Table 83. Illinois hunter perceived effectiveness of sharpshooting to control the spread of CWD through the deer herd.

If sharpshooting is the most effective method in controlling the spread of CWD in Illinois, please give your opinion of the sharpshooting program				
	I feel it should be increased %	I feel it should stay the same %	I feel it should be decreased %	I feel it should be eliminated %
Hunters in CWD Counties (n=1680)	8.4	25.4	16.1	50.1
Hunters in Adjacent Counties (n=1590)	20.3	42.6	11.4	25.6
Downstate Hunters (n=2130)	24.5	50.9	8.6	16.0

$\chi^2 = 718.33, p < 0.001, \text{Cramer's } V = 0.258$

Perceived Threat of CWD to Hunting

Participants were asked a series of questions pertaining to the threat of CWD and were asked to indicate how much they agree or disagree with a series of statements. The first statement, “The threat of CWD has been exaggerated,” received no overwhelming majority from any strata (Table 84). Hunters in adjacent counties and downstate, along with homeowners, most frequently selected “Neither” (28.6%, 32.2%, and 45.9%, respectively); hunters in CWD counties most frequently “Slightly Agree” with this statement (25.3%). Hunters in Illinois “Strongly Disagree” or “Disagree” with the statement “Because of CWD, members of my family have concerns of eating deer meat” more often than homeowners; 53% of hunters in CWD counties, 44% in adjacent counties, and 40% downstate felt this way, while only 25% of homeowners did (Table 85). Homeowners most frequently indicate “Neither” (43.6%) to this statement, while adjacent county and downstate hunters also showed some incidence to the “Neither” belief (21.4% and 25.8%, respectively). The third factor, “CWD poses a risk to deer, but not to humans,” received a varied response from participants (Table 86). Hunters in CWD counties most frequently indicated “Agree” (27.2%), and hunters in adjacent counties most

frequently indicated “Neither” (20.3%) closely followed by “Agree” (19.3%); downstate hunters and homeowners indicated “Neither” most often (24.4% and 36.7%, respectively).

Table 84. Participant agreement or disagreement to statements related to CWD.

How much do you disagree or agree with each of the following statements related to CWD?							
The threat of CWD has been exaggerated.	Strongly Disagree %	Disagree %	Slightly Disagree %	Neither %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD Counties (n=1699)	4.0	12.9	9.0	19.1	25.3	18.7	10.9
Hunters in Adjacent Counties (n=1608)	6.2	19.0	10.4	28.6	20.8	10.3	4.7
Downstate Hunters (n=2169)	5.8	22.8	13.0	32.2	16.7	7.4	2.1
Homeowners* (n=1532)	5.2	19.8	10.0	45.9	10.6	5.7	2.7

*Homeowners who do not hunt, nor have a member of the household that hunts.

$\chi^2 = 703.50, p < 0.001$, Cramer's $V = 0.183$

Table 85. Participant agreement or disagreement to statements related to CWD.

How much do you disagree or agree with each of the following statements related to CWD?							
Because of CWD, members of my family have concerns of eating deer meat.	Strongly Disagree %	Disagree %	Slightly Disagree %	Neither %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1698)	22.9	30.3	7.8	14.8	12.4	8.6	3.1
Hunters in Adjacent Counties (n=1608)	15.4	28.6	8.5	21.4	12.8	10.1	3.2
Downstate Hunters (n=2174)	13.7	25.8	8.6	25.8	12.3	10.0	3.7
Homeowners* (n=1522)	10.9	14.1	4.5	43.6	10.3	10.8	5.7

*Homeowners who do not hunt, nor have a member of the household that hunts.

$\chi^2 = 511.32, p < 0.001$, Cramer's $V = 0.156$

Table 86. Participant agreement or disagreement to statements related to CWD.

How much do you disagree or agree with each of the following statements related to CWD?							
CWD poses a risk to deer, but not to humans.	Strongly Disagree %	Disagree %	Slightly Disagree %	Neither %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1697)	5.3	12.3	11.3	15.1	17.6	27.2	11.2
Hunters in Adjacent Counties (n=1599)	7.9	16.6	15.1	20.3	15.3	19.3	5.5
Downstate Hunters (n=2139)	5.0	15.2	14.9	24.4	17.8	18.8	3.9
Homeowners* (n=1513)	6.3	16.9	10.6	36.7	12.0	12.6	4.8

*Homeowners who do not hunt, nor have a member of the household that hunts.

$\chi^2 = 421.90$, $p < 0.001$, Cramer's $V = 0.142$

Higher frequencies of hunters “Slightly Agree” or “Agree” with the statement “CWD may pose a risk to humans, but not enough is currently known to be sure” than homeowners; 52% of CWD hunters, 50% of adjacent county hunters, and 47% of downstate hunters answered this way, while only 41% of homeowners did (Table 87). Downstate hunters and homeowners also showed higher incidences of “Neither” to this statement (25.8% and 34.8%, respectively). More hunters in CWD counties “Strongly Disagree,” “Disagree,” or “Slightly Disagree” that “CWD may cause disease in humans if they eat meat from animals infected with CWD” (51%) than other Illinois hunters and homeowners (34% adjacent, 32% downstate, 16% homeowner) (Table 88). Strata other than CWD hunters show high incidence of “Neither”; 29.5% of adjacent county hunters, 34.6% of downstate hunters, and 42.5% of homeowners answered “Neither.” Hunters in Illinois most frequently responded in the disagree spectrum to the statement “Because of CWD, I have concerns about eating deer meat”; the closer to CWD counties, the higher the disagreement (Table 89). Hunters in CWD counties most frequently answered “Disagree” (30.0%) closely followed by “Strongly Disagree” (25.0%), and hunters in adjacent counties and

downstate most frequently indicated “Disagree” (26.8% and 23.7%, respectively); 33.1% of homeowners indicated “Neither.”

Table 87. Participant agreement or disagreement to statements related to CWD.

How much do you disagree or agree with each of the following statements related to CWD?							
CWD may pose a risk to humans, but not enough is currently known to be sure.	Strongly Disagree %	Disagree %	Slightly Disagree %	Neither %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1697)	6.4	10.4	6.4	16.8	23.7	28.3	8.0
Hunters in Adjacent Counties (n=1601)	5.1	9.6	8.3	21.5	25.4	24.8	5.2
Downstate Hunters (n=2148)	3.6	11.3	8.7	25.8	24.9	21.6	4.2
Homeowners* (n=1519)	3.9	8.7	5.8	34.8	19.7	21.6	5.5

*Homeowners who do not hunt, nor have a member of the household that hunts.

$\chi^2 = 213.48, p < 0.001$, Cramer's $V = 0.101$

Table 88. Participant agreement or disagreement to statements related to CWD.

How much do you disagree or agree with each of the following statements related to CWD?							
CWD may cause disease in humans if they eat meat from animals infected with CWD.	Strongly Disagree %	Disagree %	Slightly Disagree %	Neither %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1696)	14.3	24.3	12.5	22.4	14.2	9.6	2.8
Hunters in Adjacent Counties (n=1596)	7.0	15.9	11.1	29.5	18.0	14.9	3.6
Downstate Hunters (n=2116)	5.4	14.5	12.2	34.6	18.4	11.9	3.0
Homeowners* (n=1520)	3.6	7.6	4.4	42.5	17.2	18.8	6.0

*Homeowners who do not hunt, nor have a member of the household that hunts.

$\chi^2 = 566.85, p < 0.001$, Cramer's $V = 0.165$

Table 89. Participant agreement or disagreement to statements related to CWD.

How much do you disagree or agree with each of the following statements related to CWD?							
Because of CWD, I have concerns about eating deer meat.	Strongly Disagree %	Disagree %	Slightly Disagree %	Neither %	Slightly Agree %	Agree %	Strongly Agree %
Hunters in CWD counties (n=1710)	25.0	30.0	9.5	12.0	14.6	6.0	2.9
Hunters in Adjacent Counties (n=1606)	14.1	26.8	10.2	18.7	16.7	10.4	3.1
Downstate Hunters (n=2155)	13.2	23.7	11.6	21.9	17.0	8.8	3.8
Homeowners* (n=1522)	8.5	11.6	4.9	33.1	15.2	16.4	10.4

*Homeowners who do not hunt, nor have a member of the household that hunts.

$\chi^2 = 735.32$, $p < 0.001$, Cramer's $V = 0.187$

Perceived Risks of CWD and Related Illnesses and Diseases

Participants were asked to rank perceived risk to several wildlife and food borne illnesses on a scale of 1 to 4 (1= “No Risk”; 4= “High Risk”). Approximately half of each participant group responded they felt a “Slight Risk” of “Contracting Lyme Disease”; 56.0% of hunters in CWD counties, 53.0% of hunters in adjacent counties, 54.4% of downstate hunters, and 51.4% of homeowners answered this way (Table 90). “Becoming ill from Chronic Wasting Disease” received “No Risk” as the highest frequency from all strata (56.2% CWD counties, 45.1% adjacent counties, 51.1% downstate, and 52.6% homeowners); hunters in adjacent counties also indicated “Slight Risk” in a similar frequency (41.3%) (Table 91). Half of participants agree that there is a “Slight Risk” on “Becoming ill from Salmonella food poisoning”; 47.7% of hunters in CWD and adjacent counties, 48.0% of downstate hunters and 50.2% of homeowners indicated this response (Table 92).

Table 90. Stakeholder personal risk assessment of contracting Lyme Disease.

How much risk do you feel from the following?				
Contracting Lyme Disease	No Risk	Slight Risk	Moderate Risk	High Risk
	%	%	%	%
Hunters in CWD counties (n=1709)	11.6	56.0	25.6	6.8
Hunters in Adjacent Counties (n=1630)	13.1	53.0	27.0	6.9
Downstate Hunters (n=2230)	13.0	54.4	25.5	7.1
Homeowners* (n=1556)	11.2	51.4	30.4	6.9

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 17.18$, $p < 0.1$, Cramer's $V = 0.028$

Table 91. Stakeholder personal risk assessment of becoming ill from CWD.

How much risk do you feel from the following?				
Becoming ill from Chronic Wasting Disease	No Risk	Slight Risk	Moderate Risk	High Risk
	%	%	%	%
Hunters in CWD counties (n=1702)	56.2	34.2	7.5	2.2
Hunters in Adjacent Counties (n=1619)	45.1	41.3	10.3	3.3
Downstate Hunters (n=2217)	51.1	35.0	10.9	3.0
Homeowners* (n=1535)	52.6	35.6	8.9	2.9

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 52.86$, $p < 0.001$, Cramer's $V = 0.050$

Table 92. Stakeholder personal risk assessment of becoming ill from Salmonella food poisoning.

How much risk do you feel from the following?				
Becoming ill from Salmonella food poisoning	No Risk	Slight Risk	Moderate Risk	High Risk
	%	%	%	%
Hunters in CWD counties (n=1706)	17.1	47.7	27.4	7.9
Hunters in Adjacent Counties (n=1627)	18.8	47.7	25.3	8.2
Downstate Hunters (n=2227)	21.4	48.0	23.4	7.2
Homeowners* (n=1552)	10.5	50.2	31.2	8.1

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 90.12$, $p < 0.001$, Cramer's $V = 0.065$

Similar to the Salmonella statement, approximately half of hunters and homeowners perceived a “Slight Risk” of “Becoming ill from E. coli food poisoning” (49.7 from CWD, 48.6% from adjacent, 50.0% from downstate, and 51.9% of homeowners) (Table 93). “Contracting Rabies” was deemed a “Slight Risk” from participants (53.0% CWD counties, 50.1% adjacent counties, 46.1% downstate, 56.7% homeowners), whereas slightly fewer participants (39.8%, 41.7%, 44.7%, 32.6%, respectively) responded “No Risk” to this condition (Table 94). Approximately half of respondents from each strata felt there is “Slight Risk” of “Contracting West Nile Virus” (54.7% of CWD hunters, 50.5% of adjacent hunters, 51.1% of downstate hunters, and 49.8% of homeowners) (Table 95). The most frequent response for the risk felt from “Contracting Mad Cow (BSE) Disease” from hunter participants was “No Risk”; 60.7% of hunters from CWD counties, 57.9% of hunters in adjacent counties, and 58.9% of downstate hunters indicated this response. Homeowners responded “No Risk” at a slightly lower frequency (48.6%), and their following most frequent response was “Slight Risk” at 43.0% (Table 96).

Table 93. Stakeholder personal risk assessment of becoming ill from E. coli food poisoning.

How much risk do you feel from the following?				
Becoming ill from E. coli food poisoning	No Risk %	Slight Risk %	Moderate Risk %	High Risk %
Hunters in CWD counties (n=1707)	16.9	49.7	25.8	7.6
Hunters in Adjacent Counties (n=1626)	19.3	48.6	23.9	8.2
Downstate Hunters (n=2228)	20.8	50.0	22.2	7.1
Homeowners* (n=1557)	11.0	51.9	29.2	7.9

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 78.11$, $p < 0.001$, Cramer's $V = 0.060$

Table 94. Stakeholder personal risk assessment of contracting rabies.

How much risk do you feel from the following?				
Contracting Rabies	No Risk	Slight Risk	Moderate Risk	High Risk
	%	%	%	%
Hunters in CWD counties (n=1706)	39.8	53.0	4.9	2.3
Hunters in Adjacent Counties (n=1627)	41.7	50.1	6.1	2.2
Downstate Hunters (n=2224)	44.7	46.1	6.3	2.8
Homeowners* (n=1549)	32.6	56.7	8.5	2.3

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 75.23$, $p < 0.001$, Cramer's $V = 0.059$

Table 95. Stakeholder personal risk assessment of contracting West Nile Virus.

How much risk do you feel from the following?				
Contracting West Nile Virus	No Risk	Slight Risk	Moderate Risk	High Risk
	%	%	%	%
Hunters in CWD counties (n=1708)	15.3	54.7	23.9	6.0
Hunters in Adjacent Counties (n=1626)	15.9	50.5	27.1	6.6
Downstate Hunters (n=2230)	17.0	51.1	24.5	7.0
Homeowners* (n=1555)	8.8	49.8	32.1	9.3

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 91.03$, $p < 0.001$, Cramer's $V = 0.065$

Table 96. Stakeholder personal risk assessment of contracting Mad Cow (BSE) Disease.

How much risk do you feel from the following?				
Contracting Mad Cow (BSE) Disease	No Risk	Slight Risk	Moderate Risk	High Risk
	%	%	%	%
Hunters in CWD counties (n=1705)	60.7	34.0	3.5	1.8
Hunters in Adjacent Counties (n=1626)	57.9	35.2	4.9	2.0
Downstate Hunters (n=2218)	58.9	33.3	5.8	2.0
Homeowners* (n=1550)	48.6	43.0	5.7	2.7

*Homeowners who did not hunt, nor had a member of the household who hunted.

$\chi^2 = 68.62$, $p < 0.001$, Cramer's $V = 0.057$

Potential for Conflict Index (PCI)

The Potential for Conflict Index (PCI) (Vaske, et al. 2010; Vaske et al. 2006) is a visual representation of the mean and distribution (standard deviation) about the mean for responses to a specific questionnaire statement, relative to the position on the scale for that statement. It provides a visual and numerical depiction of the amount of consensus (size of the circle) with the position of the circle on the scale illustrating the location of the mean compared to the scale labels. In other words, the larger the circle the less consensus and the smaller the more consensus among the group (represented by the PCI value); circles above the zero line show agreement with the statement, below show disagreement. The PCI values can range from 0.0 to 1.0, with higher values indicative of greater conflict over the issue existing within the group. PCI therefore gives a graphic representation of the amount of agreement and relative position of the average response for a given variable. We conducted PCI analyses on selected variables related to IDNR management of CWD and levels of trust stakeholder groups held toward the agency for key factors related to CWD. The following figures illustrate the results of the PCI analysis.

Acceptability of CWD Management Practices

Hunters in the three sample groups were asked to state the extent to which they found the use of sharpshooting to supplement hunting in areas known to contain CWD in the deer herd acceptable or unacceptable. PCI analysis (Figure 1) shows that hunters in CWD counties found this practice unacceptable more than hunters in adjacent or downstate groups. More downstate deer hunters found sharpshooting acceptable than found it unacceptable. Consensus on this issue was relatively similar, with fewer consensuses among hunters in adjacent counties than the other

two groups. Given the range of PCI values (0.39 – 0.45) and distribution below (hunters in CWD counties) and above (downstate hunters) zero there is a moderate chance of conflict regarding this issue.

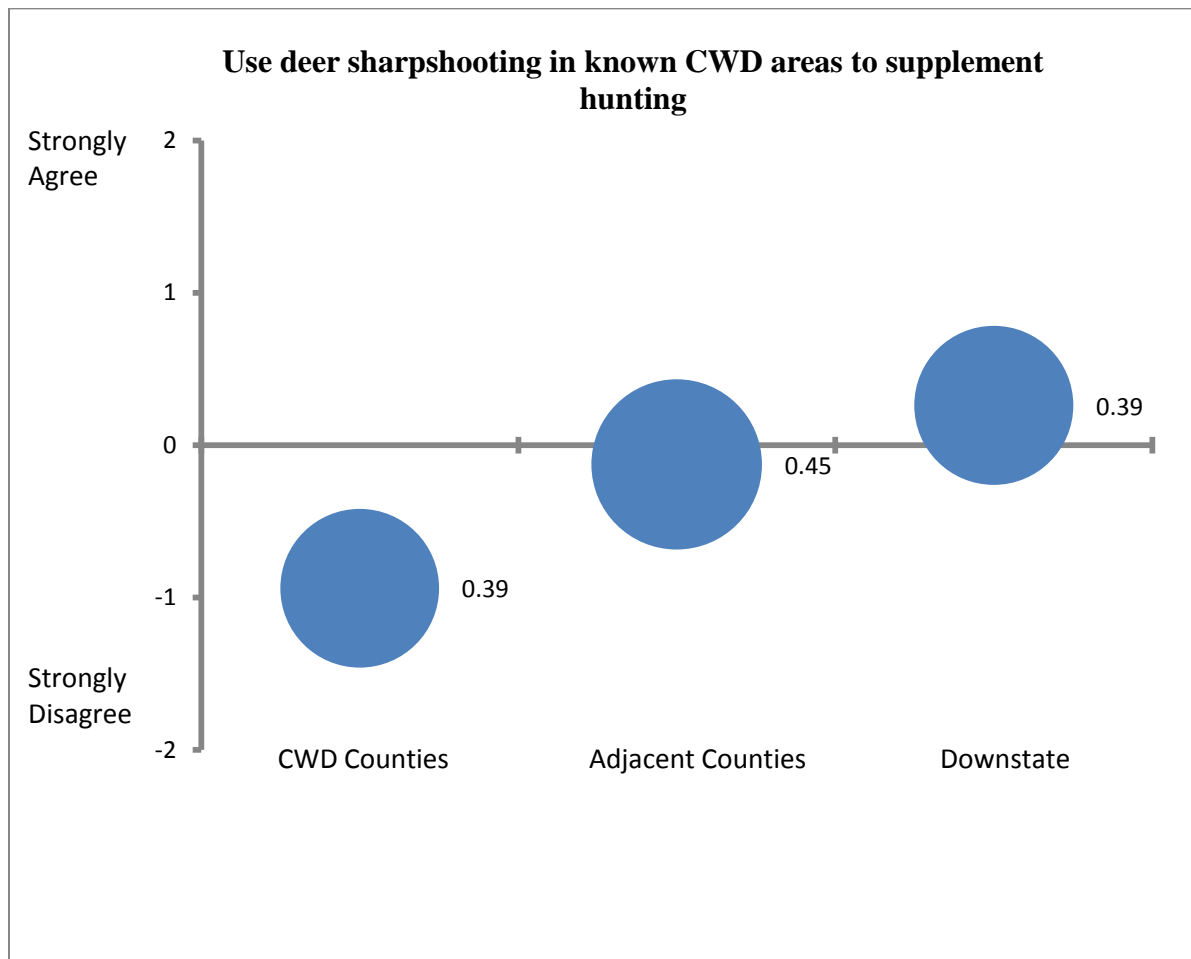


Figure 1. Consensus and relative level of acceptance among Illinois hunters in CWD counties, adjacent counties, and downstate toward use of sharpshooting in known CWD areas.

Hunters across the three groups were in general agreement that holding CWD management hunts in those counties affected by CWD was acceptable (Figure 2), however hunters in CWD counties exhibited less consensus than hunters in adjacent counties or downstate. Taking no action to manage CWD was unacceptable to all hunter groups, with hunters in adjacent counties and downstate agreeing more with one another than hunters in CWD counties (Figure 3). PCI values indicate an increased potential for conflict with increased proximity to CWD-affected regions.

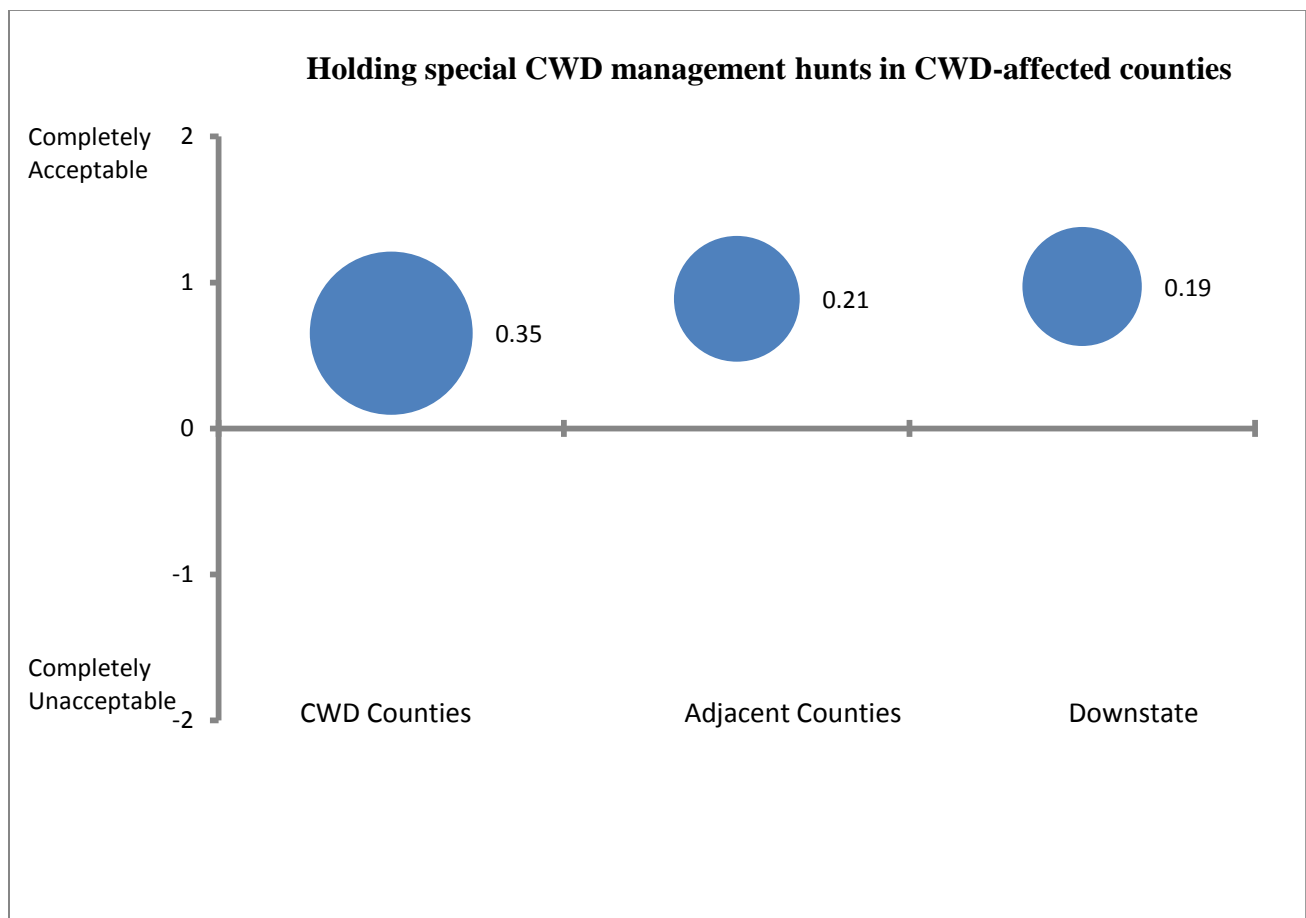


Figure 2. Potential for conflict among Illinois hunters on the practice of holding special CWD management hunts in CWD-affected counties.

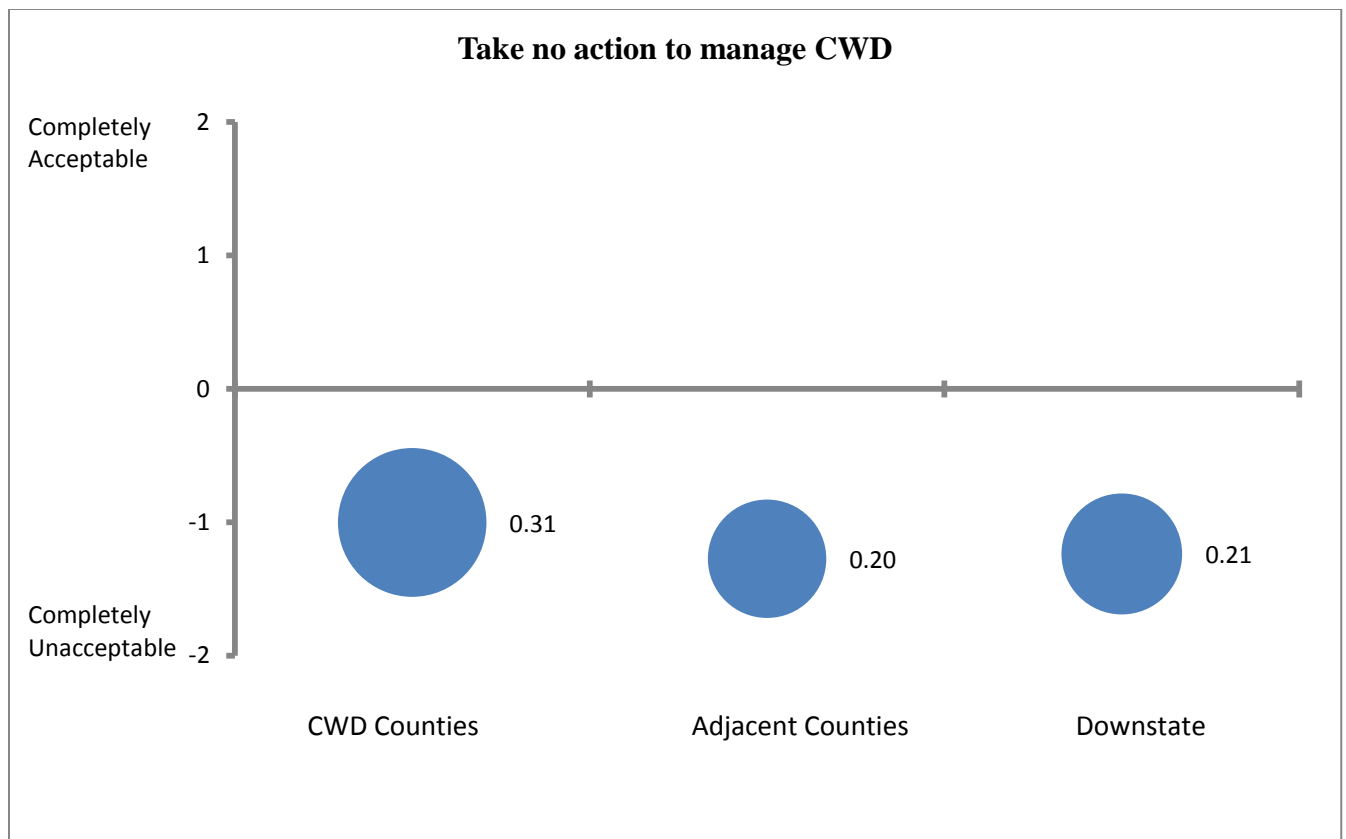


Figure 3. Potential for conflict index for acceptability of taking no action to manage CWD among Illinois hunters.

Decreased harvest of deer in counties affected by CWD was viewed as unacceptable by all hunters in CWD counties, most hunters in adjacent counties, but slightly more than half of hunters downstate (Figure 4). Within-group consensus was identical among hunters in CWD and adjacent counties (PCI value = 0.32), however hunters in the downstate region had greater consensus (PCI value = 0.28). Given the distribution of PCI values relative to the zero line suggests a slight potential for conflict over decreased deer harvest.

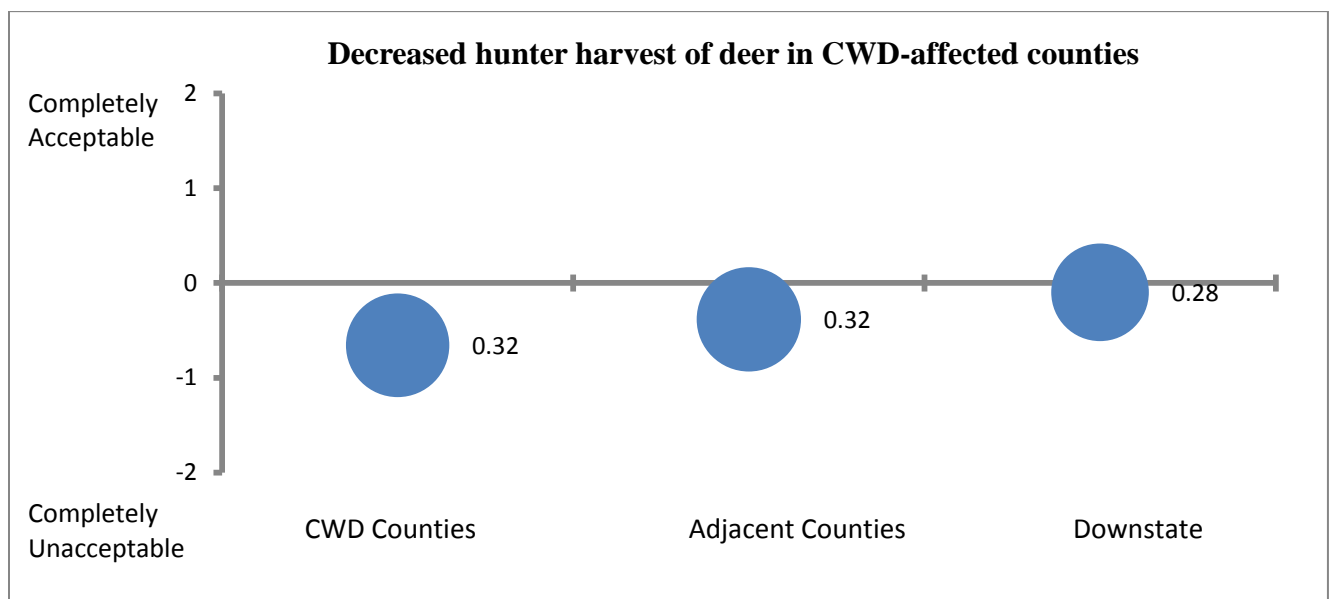


Figure 4. Level of acceptability among Illinois hunters for decreased harvest of deer in counties affected by CWD.

Trust in IDNR Management of CWD

Each hunter sample, plus the sample of homeowners, were provided with a series of statements and asked to give the extent to which they agreed or disagreed with each statement. Each of the four groups indicated trusting IDNR to provide enough information to allow them to decide their own actions regarding CWD (Figure 5). Less consensus existed among hunters in CWD counties than hunters in adjacent counties or downstate (PCI values were equal and at the same level of agreement for these latter two groups). Homeowners showed greater consensus but lower mean agreement compared to the hunters groups. A similar pattern in PCI values was evident when participants were asked if they trusted IDNR to provide the best information on CWD in Illinois (Figure 6). Again, consensus was lowest among hunters in the CWD counties (PCI = 0.27) and increased as groups moved away from the CWD region (PCI = 0.22 and 0.17, respectively). Homeowners again showed the greatest consensus (PCI = 0.13) and a mean level of agreement similar to hunters in the CWD counties.

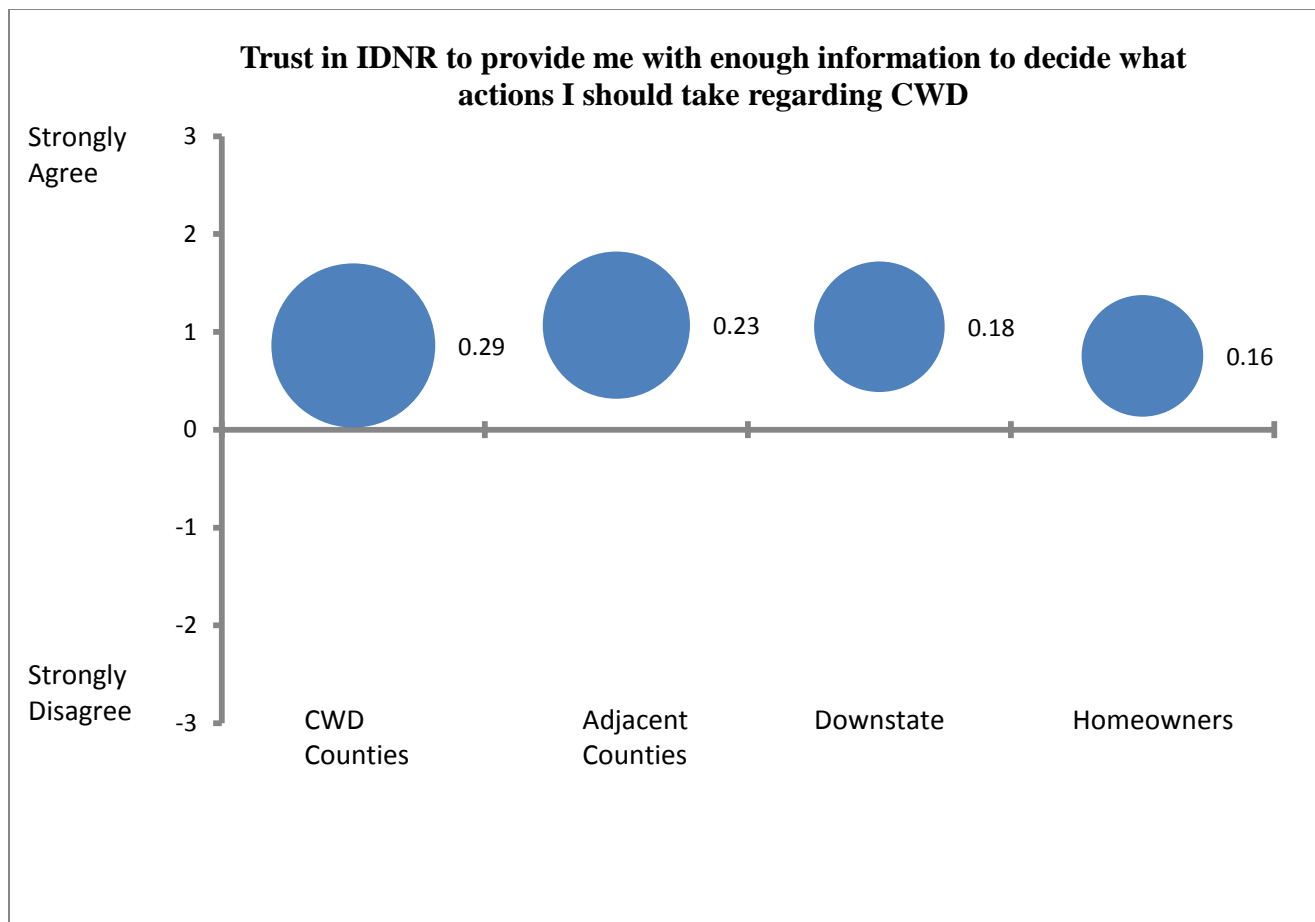


Figure 5. Trust in IDNR to provide enough information to decide action regarding CWD among three groups of Illinois hunters and homeowners in counties affected by CWD.

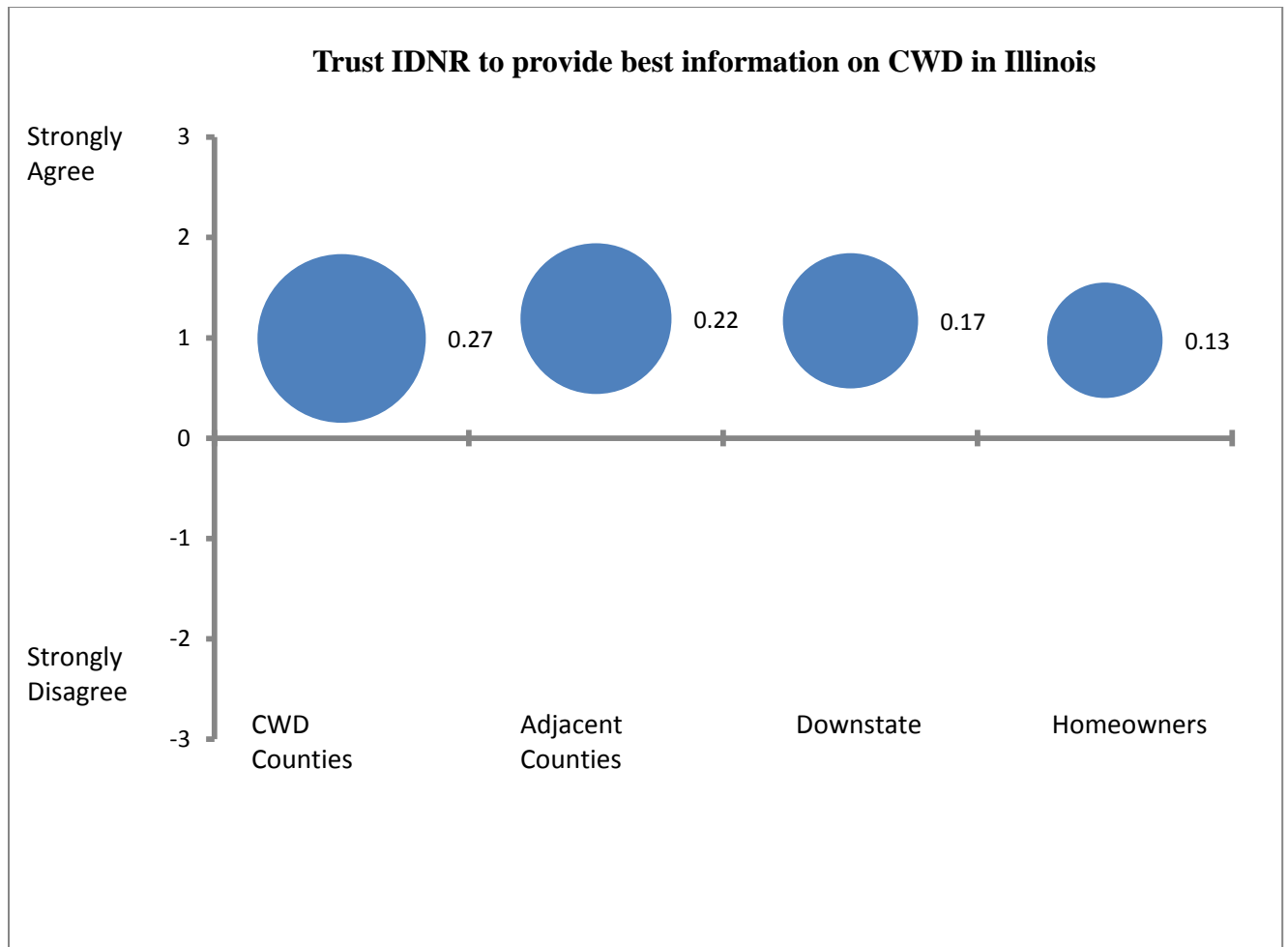


Figure 6. Potential for conflict over perceived trust in IDNR to provide the best information on CWD in Illinois.

Perceptions of trust in IDNR to make good management decisions regarding CWD issues resulted in relative PCI similar to those for the preceding statement (Figure 7). Consensus declined with increased proximity to CWD regions (0.18 for Downstate hunters to 0.35 for hunters in CWD counties), with homeowners in counties affected by CWD exhibiting the greatest consensus (0.11) among the four groups and less than one-third of that among hunters in the same region. This similarity in PCI values and position continued for perceived trust in IDNR to listen to hunters' concerns about CWD (Figure 8). Homeowners showed the greatest consensus (PCI = 0.11), whereas hunters in CWD counties had the lowest (PCI = 0.25) although

the value was somewhat low. An analogous pattern was found with PCI values for the statement “I trust IDNR to provide timely information related to CWD issues” (Figure 9). PCI values were slightly higher among hunters (0.33 for CWD and 0.25 for adjacent counties, 0.20 for downstate) but remained the same (0.11) among homeowners in the CWD region. All positions were positive relative to zero. Low PCI values were found for respondents’ trust in the agency to provide truthful information about human safety issues related to CWD, indicating little conflict over this statement (Figure 10). An equivalent pattern was observed for PCI values across the four groups, as responses from homeowners provided the lowest PCI value (0.09) and those from hunters in the CWD region the highest at 0.23.

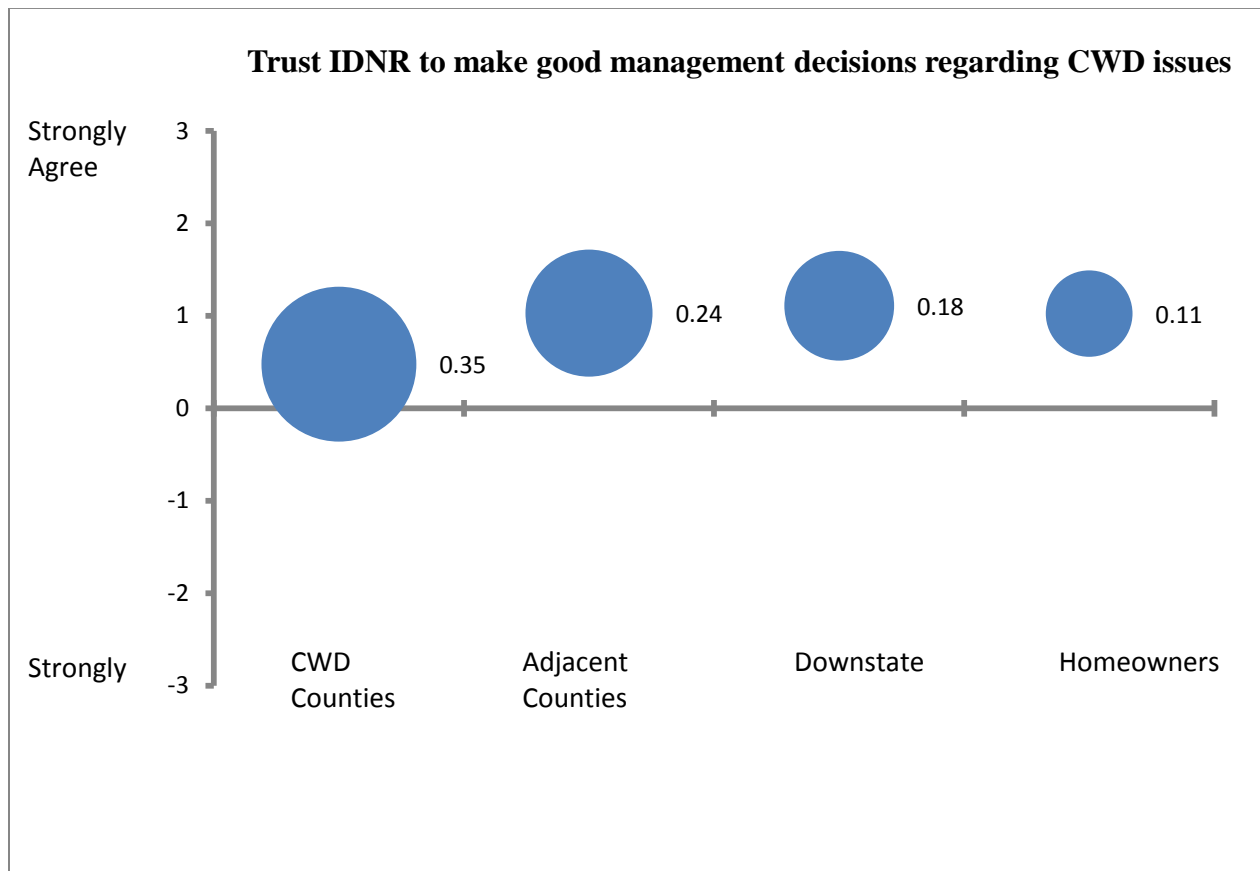


Figure 7. Potential for conflict over perceived trust in IDNR to make good decisions regarding CWD in Illinois.

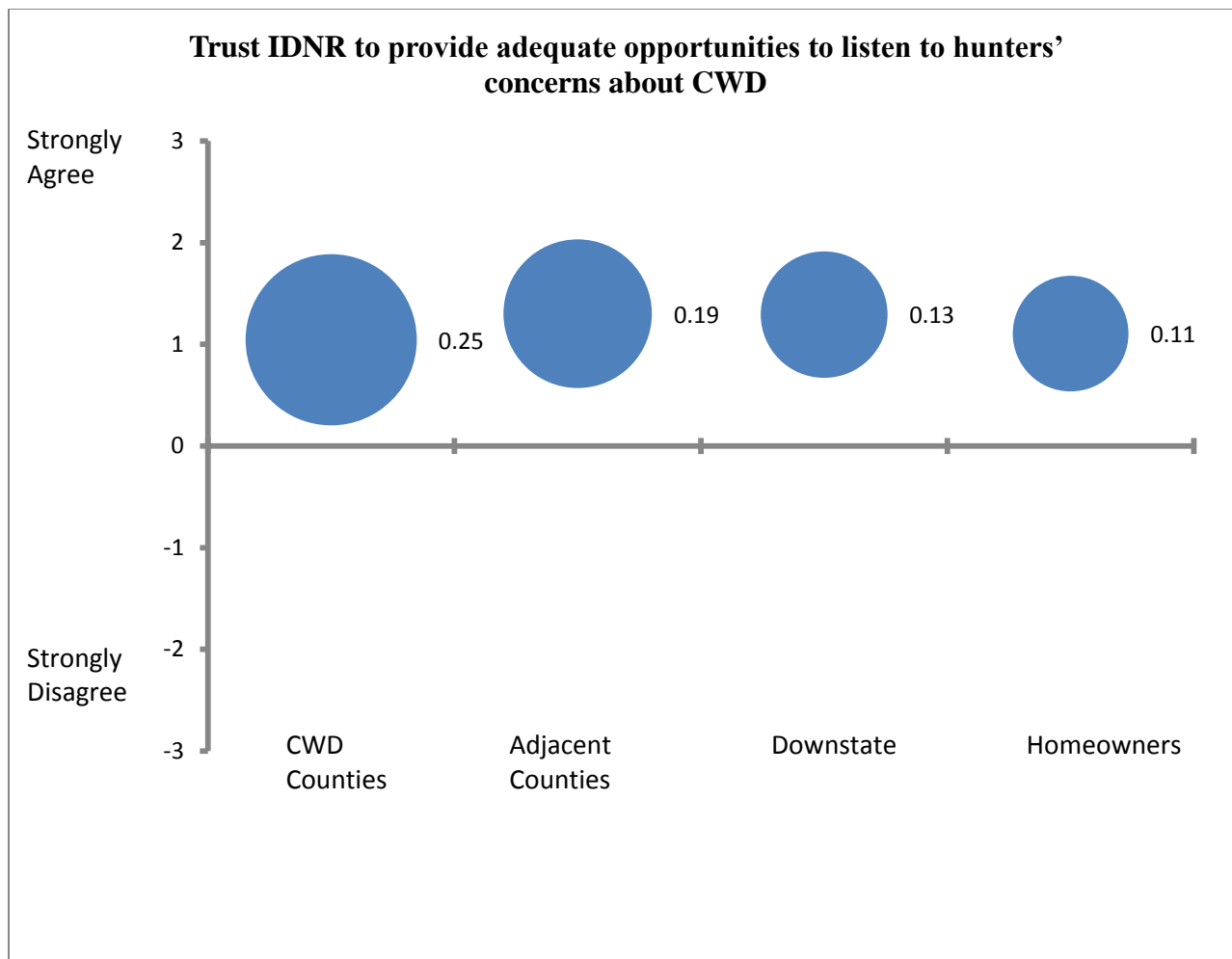


Figure 8. Potential for conflict over perceived trust in IDNR to provide adequate opportunities to listen to hunters' concerns about CWD.

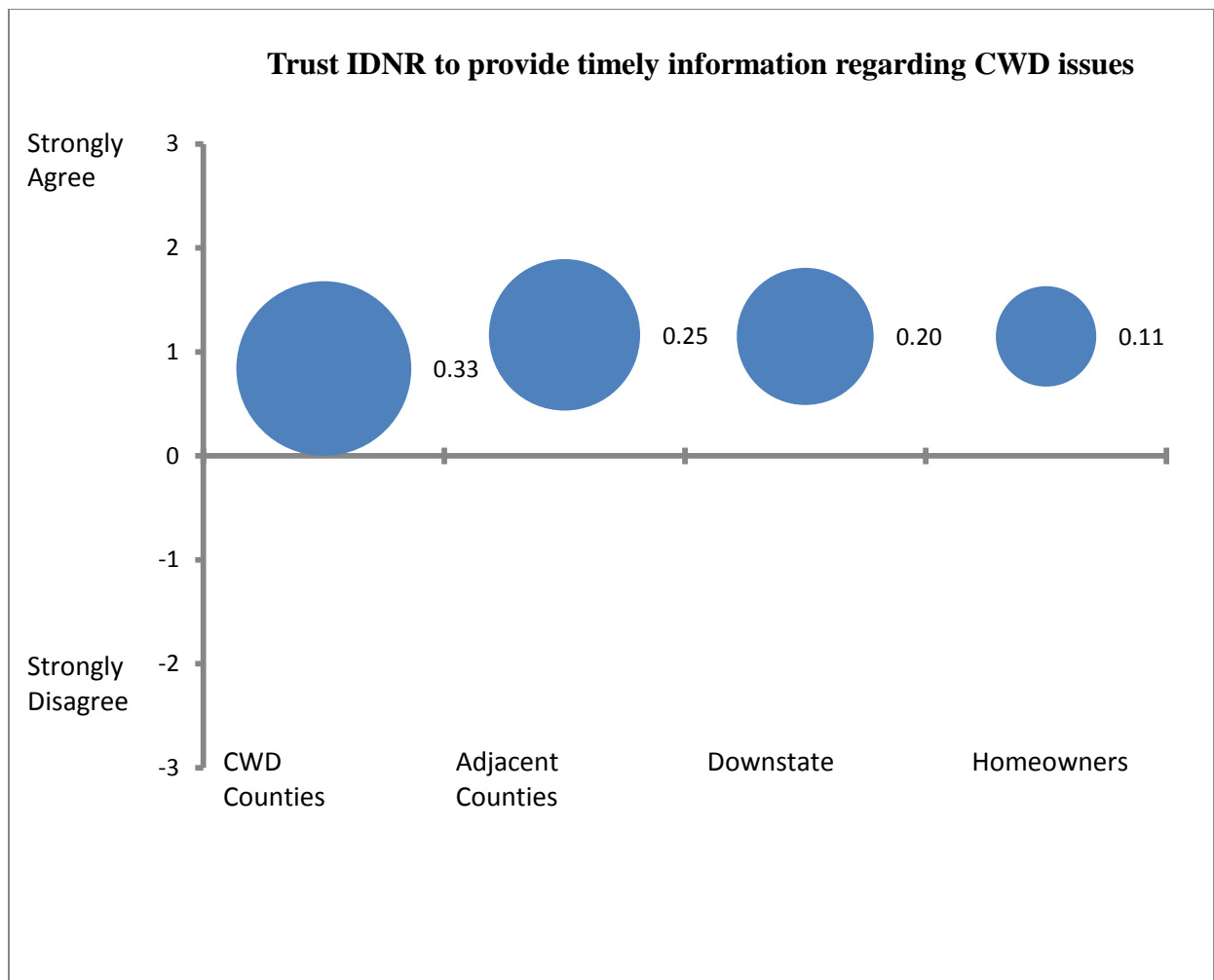


Figure 9. Potential for conflict over perceived trust in IDNR to provide timely information regarding CWD issues.

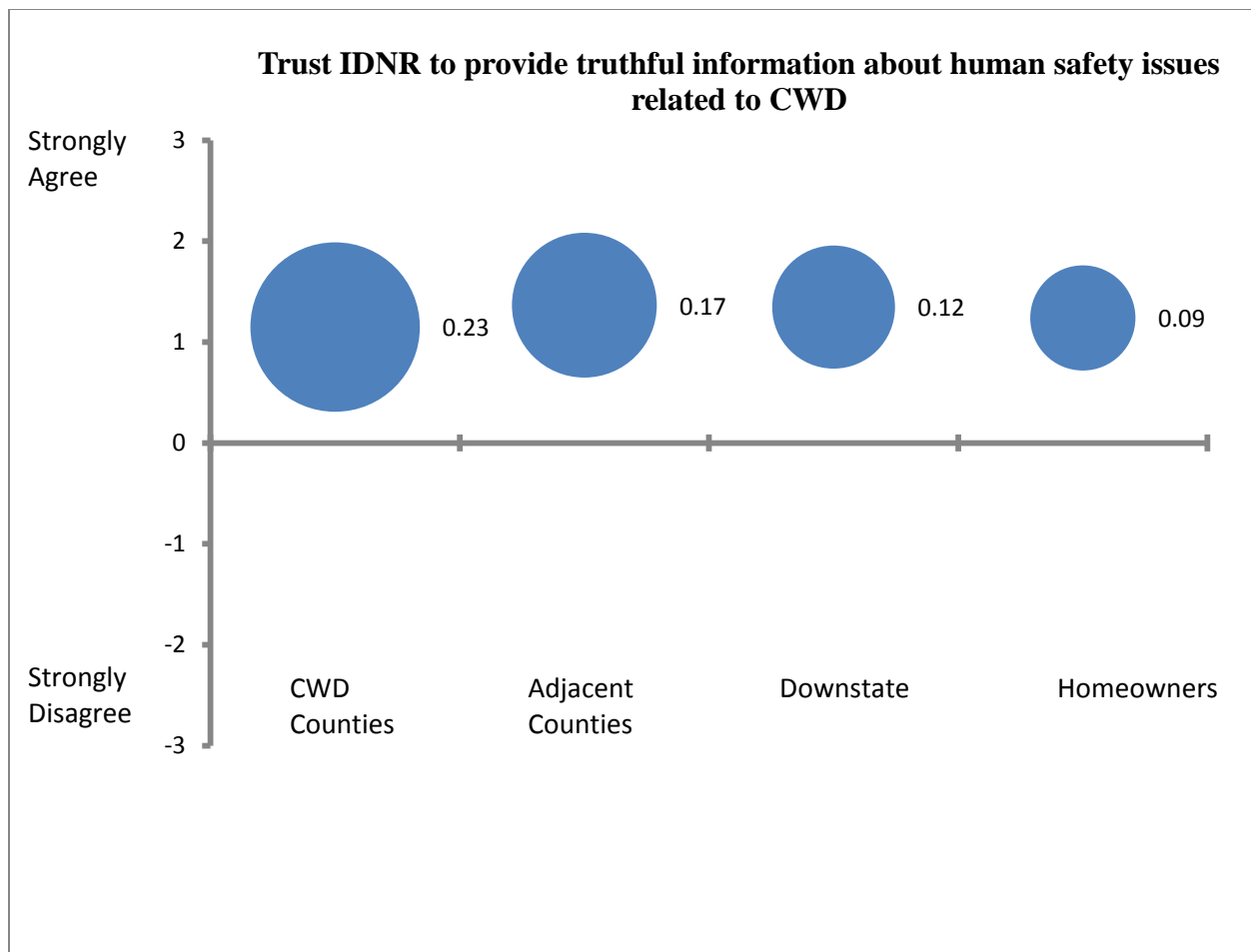


Figure 10. Potential for conflict over perceived trust in IDNR to provide truthful information about human safety issues.

When asked to respond to the statement “I trust in IDNR to provide truthful information about deer population estimates” the pattern found in previous PCI calculations persisted (Figure 11). Deer hunters in CWD-affected counties provided the lowest consensus regarding this statement (0.24) (although the PCI value itself was low), values for hunters from adjacent counties and downstate were similar to one another (0.16 and 0.13, respectively), whereas homeowners from CWD counties again provided the lowest PCI value (0.09). All PCI values were above zero, meaning trust was positive for this statement. PCI values for the statement “I trust IDNR to provide truthful information about how CWD spreads” were almost identical to those from the previous statement regarding trust in deer population estimates,

varying only one point in value lower for hunters in CWD counties and downstate, one point higher for hunters in counties adjacent to the CWD region, and identical for homeowners (Figure 12).

The pattern of PCI values remained unchanged for the statement “I trust IDNR to properly address CWD in Illinois” (Figure 13). Trust remained positive; however results from hunters in the CWD region suggest lower overall trust than the other groups in the study.

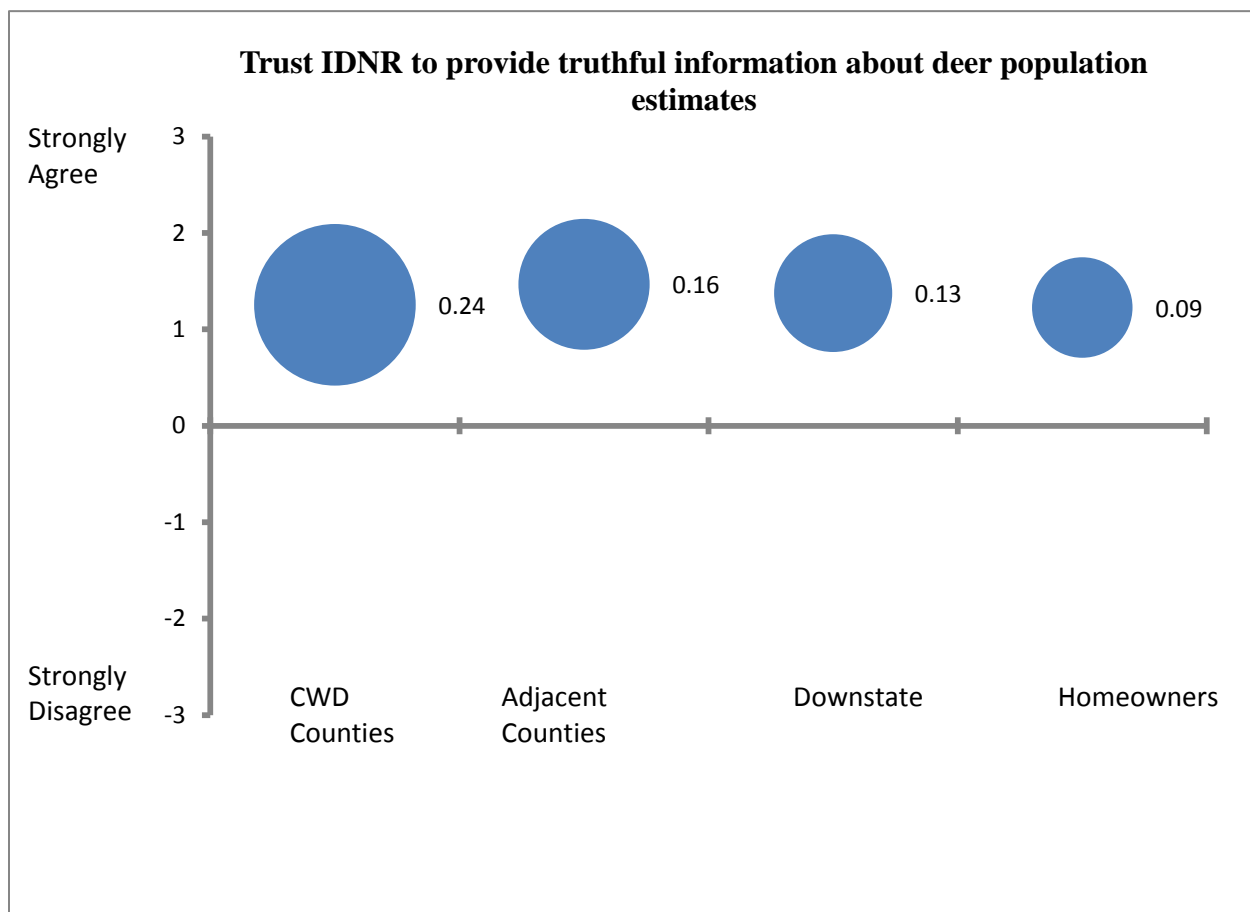


Figure 11. Potential for conflict over perceived trust in IDNR to provide truthful information about deer population estimates.

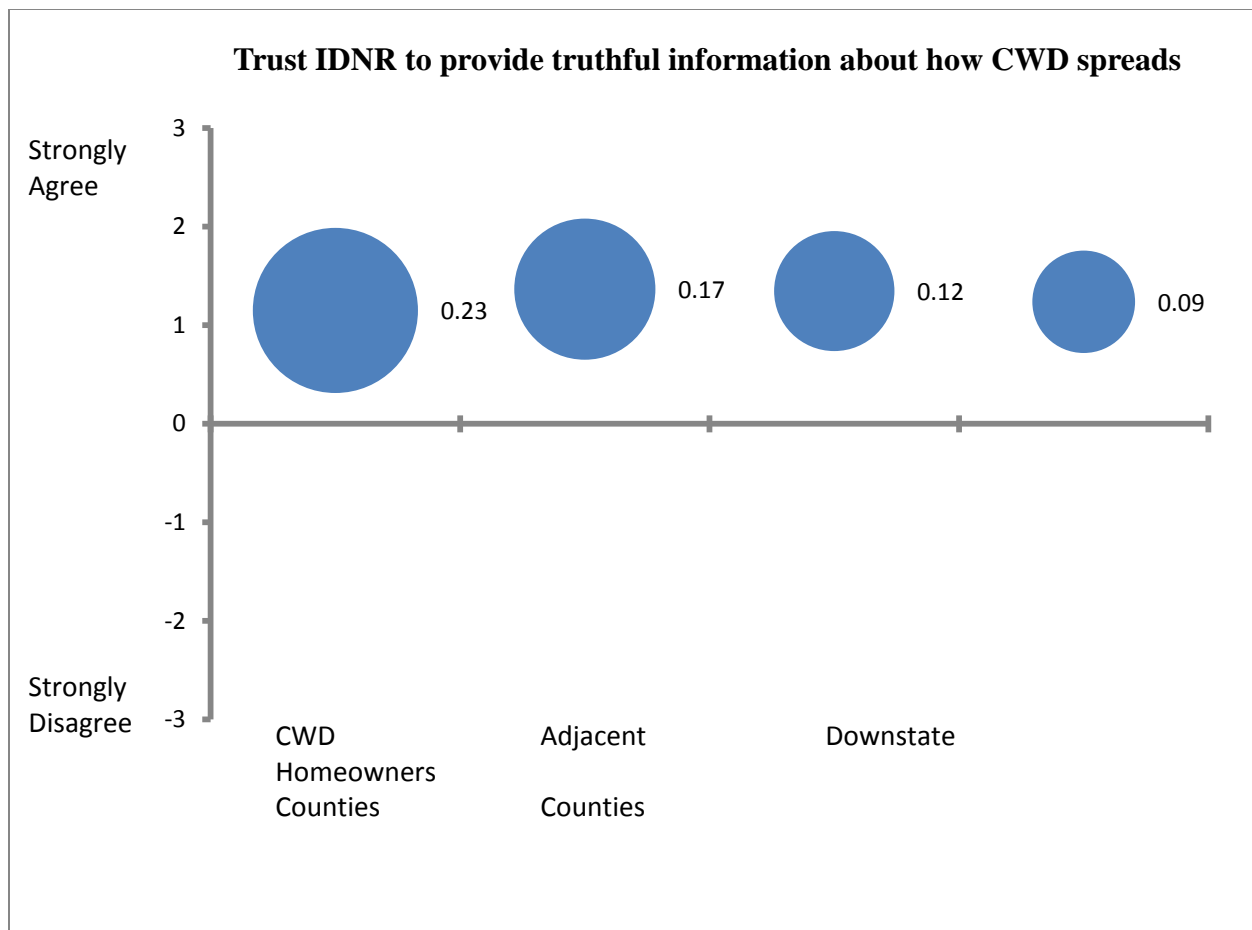


Figure 12. Potential for conflict over perceived trust in IDNR to provide truthful information about how CWD spreads.

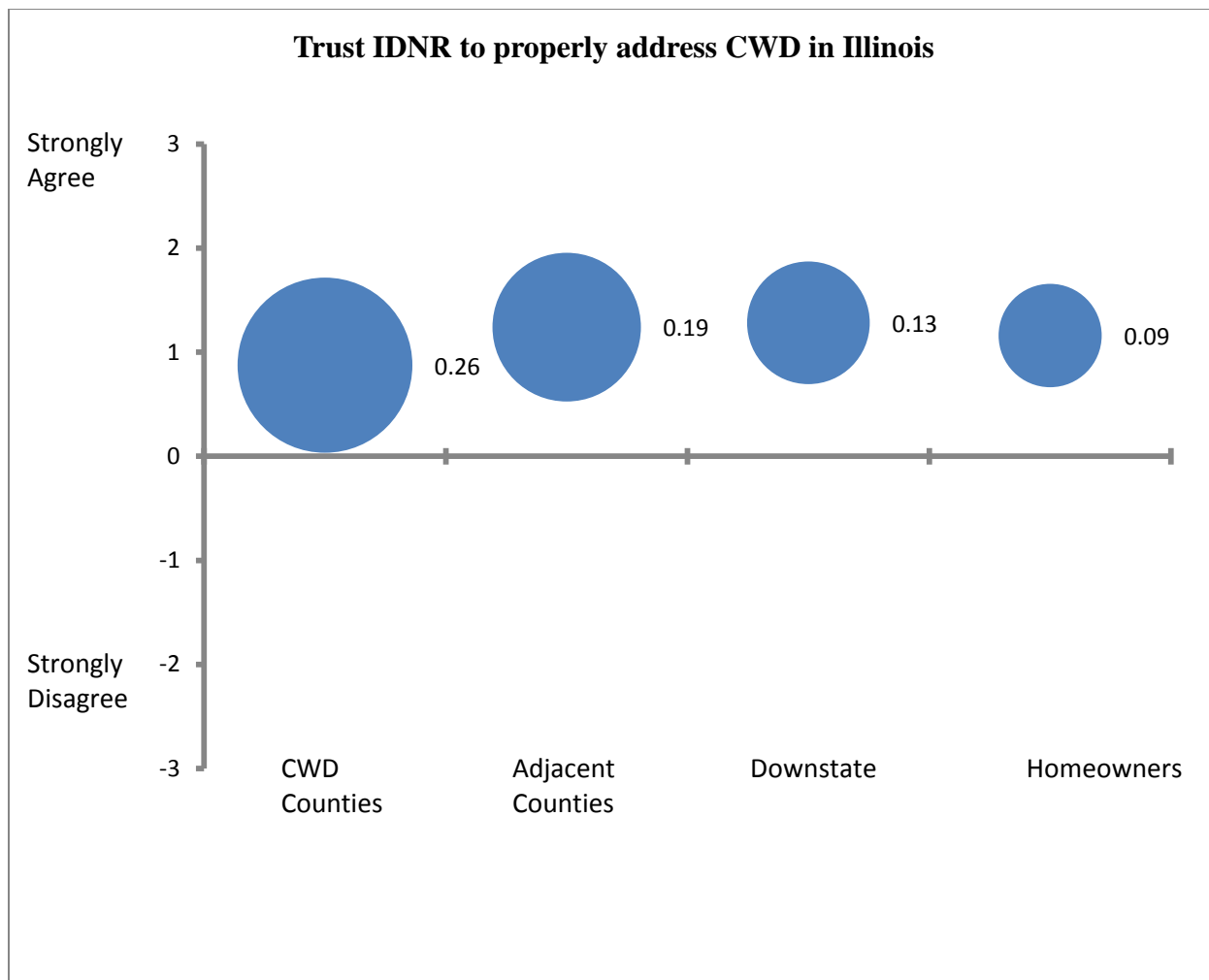


Figure 13. Potential for conflict over perceived trust in IDNR to properly address CWD in Illinois.

Results of the PCI analysis for “I trust IDNR to provide truthful information on the number of CWD-positive deer discovered in Illinois” were identical (Figure 14) to those for information on deer populations provided in Figure 11.

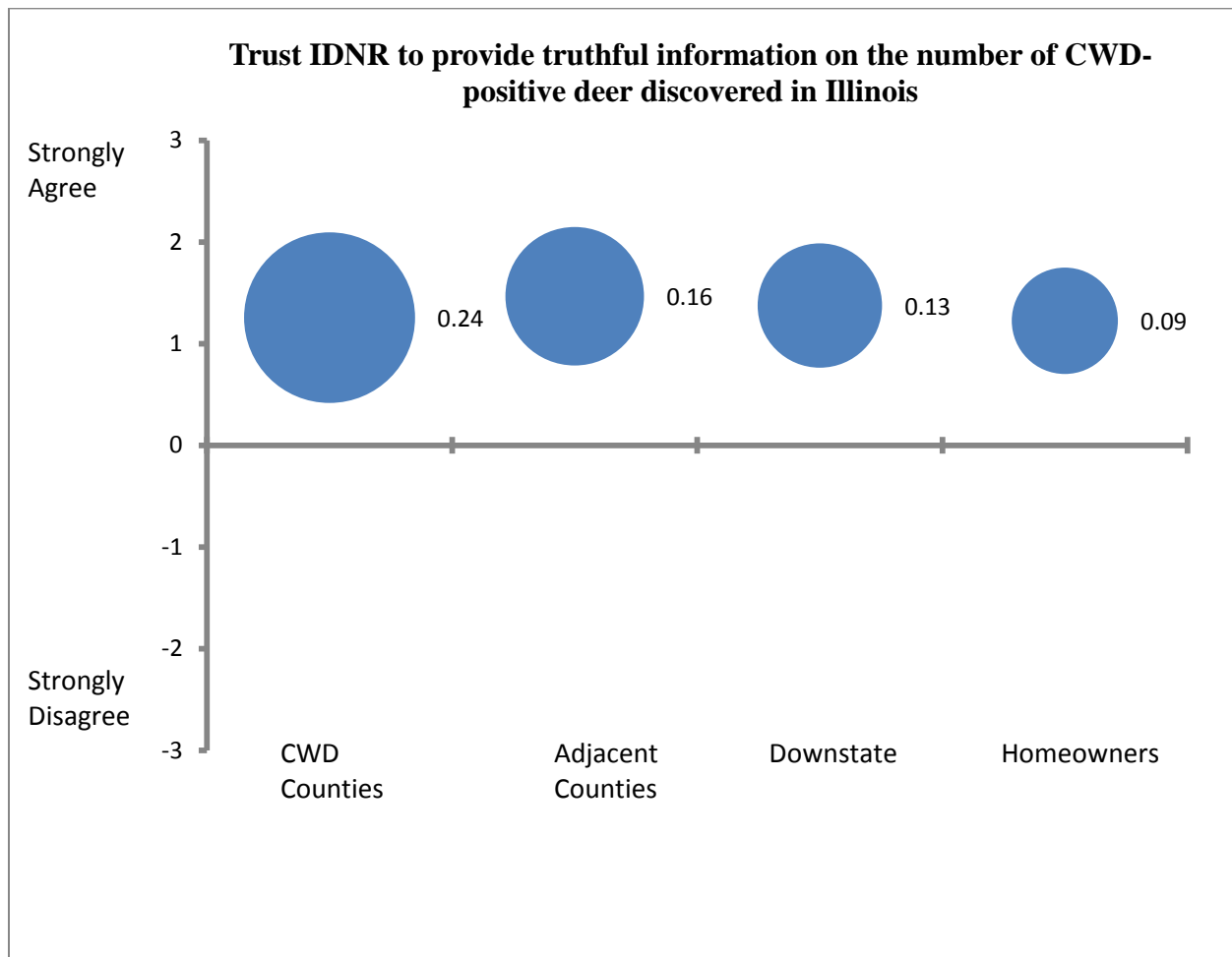


Figure 14. Potential for conflict over perceived trust in IDNR to provide truthful information on the number of CWD-positive deer discovered in Illinois.

A wider range of trust was found to exist among hunters in CWD-affected counties and those adjacent for trust in IDNR to follow the best science available in managing CWD, however those values (0.26 and 0.19, respectively) were low (Figure 15). Values for downstate hunters and homeowners were identical to statements for trust in IDNR to properly address CWD and provide truthful information on numbers of CWD positive cases.

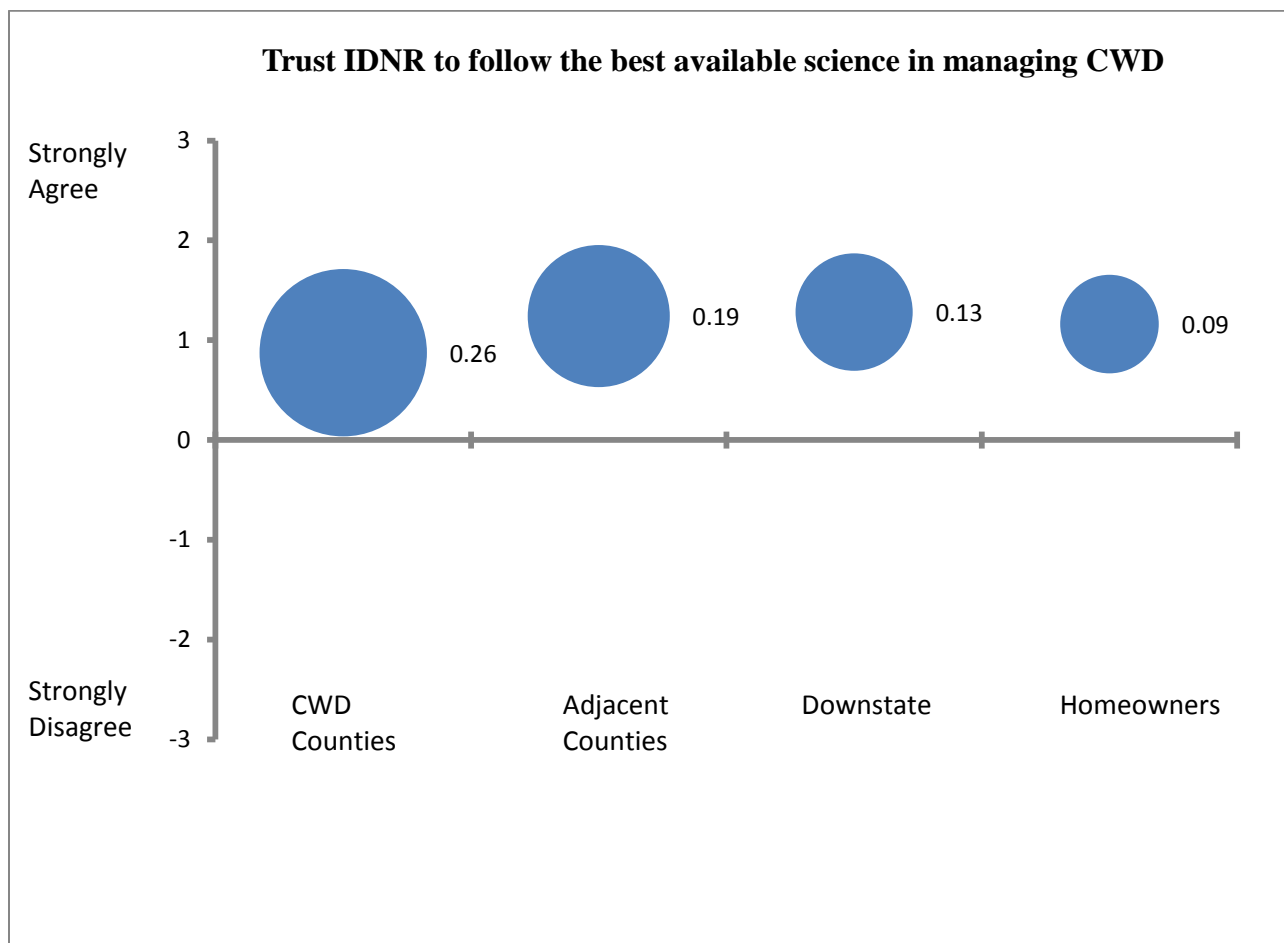


Figure 15. Potential for conflict over perceived trust in IDNR to follow the best available science in managing CWD.

Beliefs Regarding CWD

Hunters in CWD-affected counties expressed more negative beliefs compared to other groups regarding the beliefs that CWD could spread throughout the state's deer herd if left unchecked (Figure 16). Hunters' beliefs became more positive with increased distance from CWD counties, and homeowners in the CWD counties expressed the most positive beliefs of all groups. PCI for both hunters in and adjacent to the CWD counties showed less consensus on beliefs about the spread of CWD than downstate hunters or homeowners. The same pattern and distribution about the neutral line was observed in PCI values for beliefs that CWD could "wipe out" the deer herd in Illinois if left unchecked (Figure 17). The same pattern was again found for PCI values for beliefs about the need to reduce the deer population in northern Illinois as a means to control CWD (Figure 18). Consensus was evident among hunters in counties adjacent to CWD-affected areas, downstate hunters, and homeowners in the CWD counties involving beliefs that IDNR has taken correct measures to control the spread of CWD, but much less consensus existed among hunters in CWD counties (Figure 19). As the PCI graphic for hunters from CWD counties straddles the neutral line it provides further evidence that this lack of consensus among these hunters varied between agreement and disagreement.

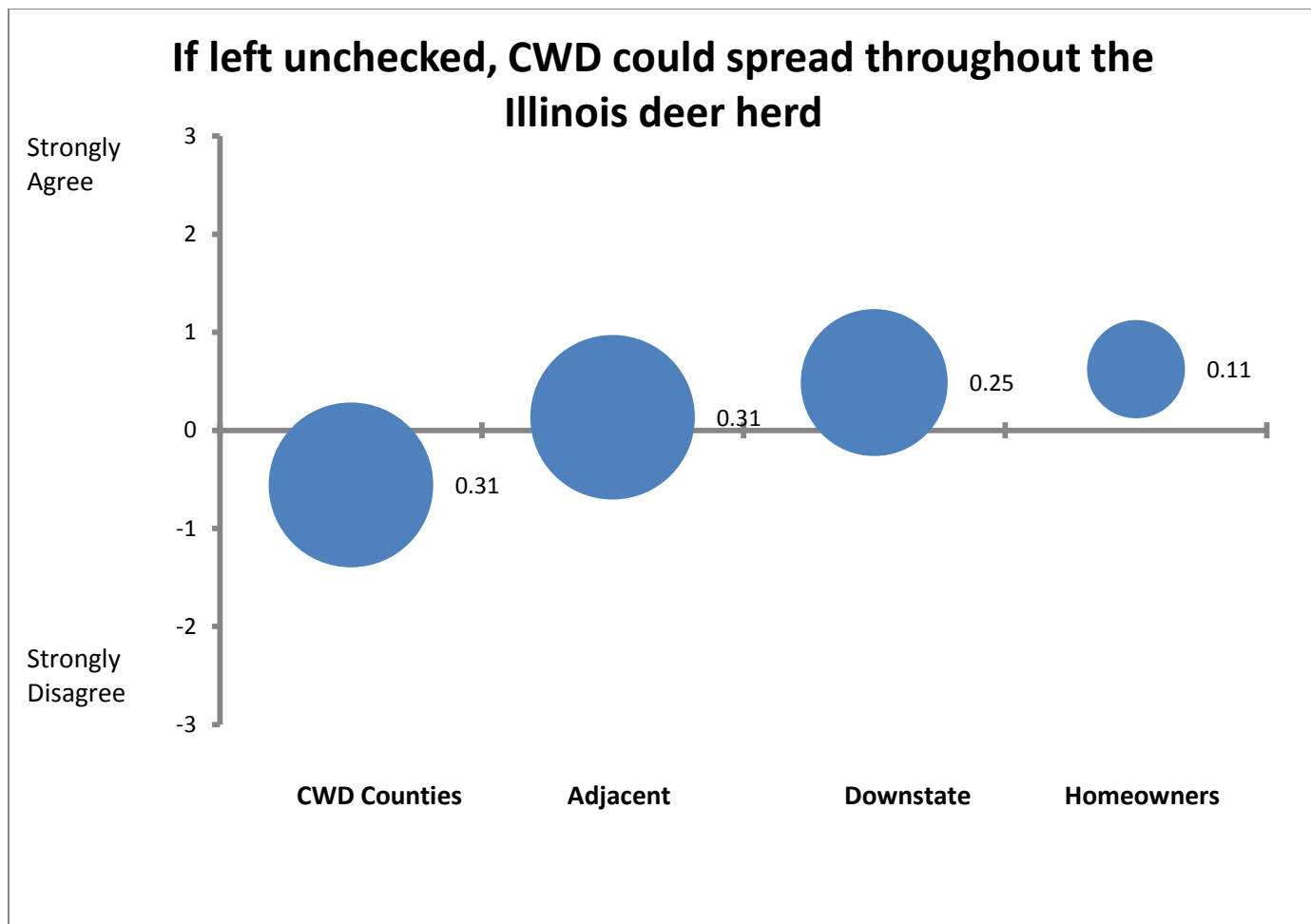


Figure 16. Potential for Conflict Index for beliefs that, if left unchecked, CWD could spread throughout the Illinois deer herd.

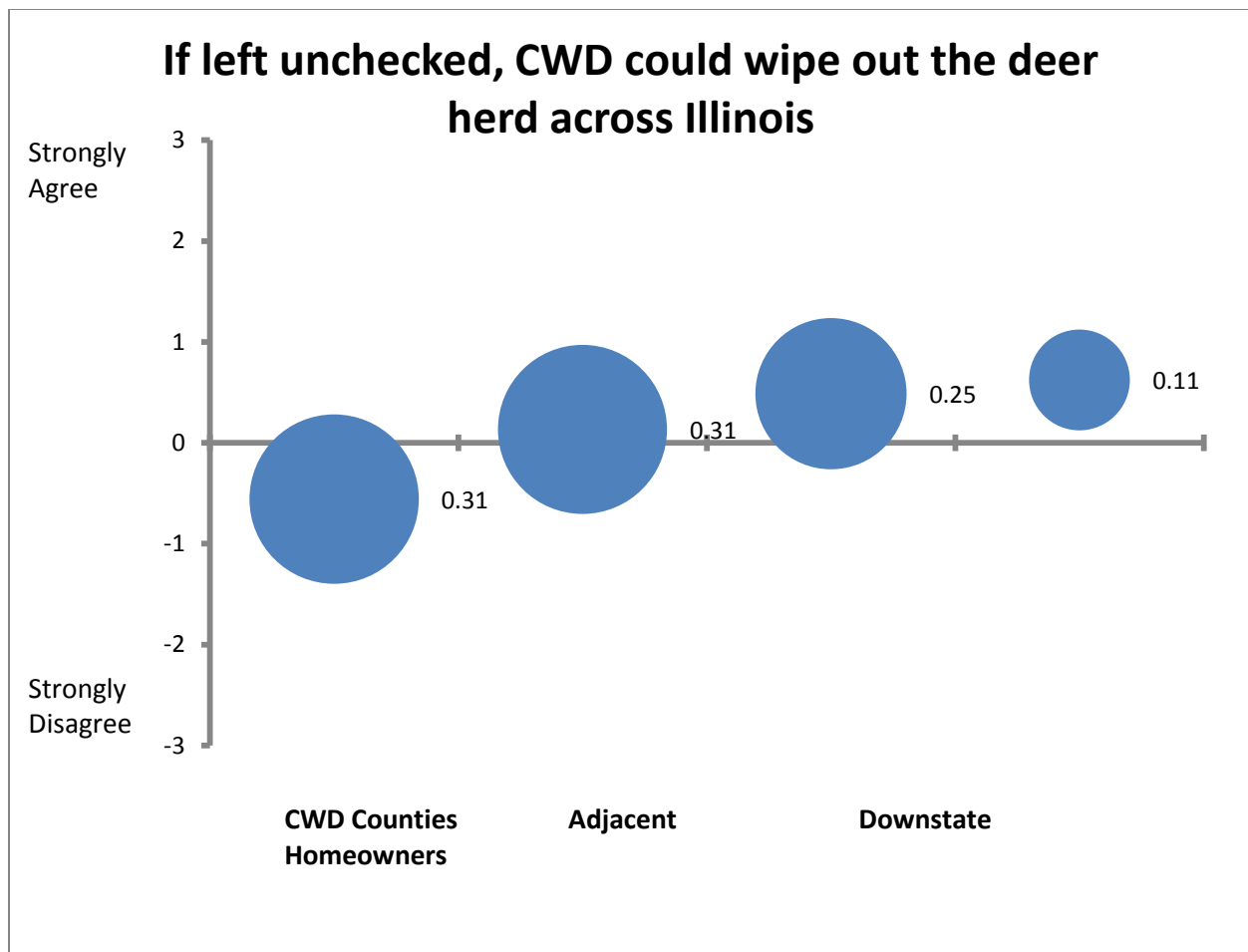


Figure 17. Potential for Conflict Index for beliefs that, if left unchecked, CWD could wipe out the deer herd across Illinois.

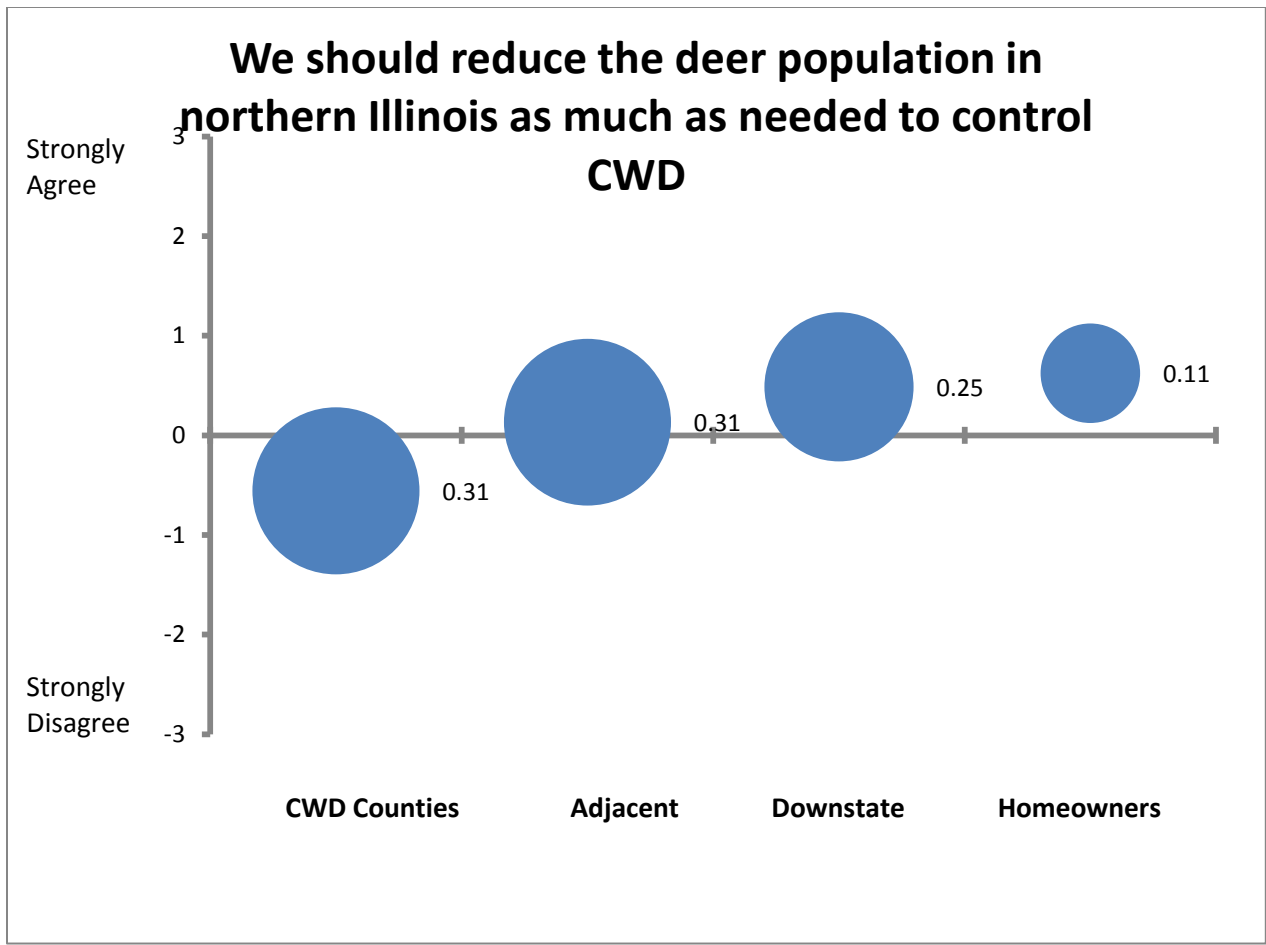


Figure 18. Potential for Conflict Index for beliefs that we should reduce the deer population in Illinois as much as needed to control CWD.

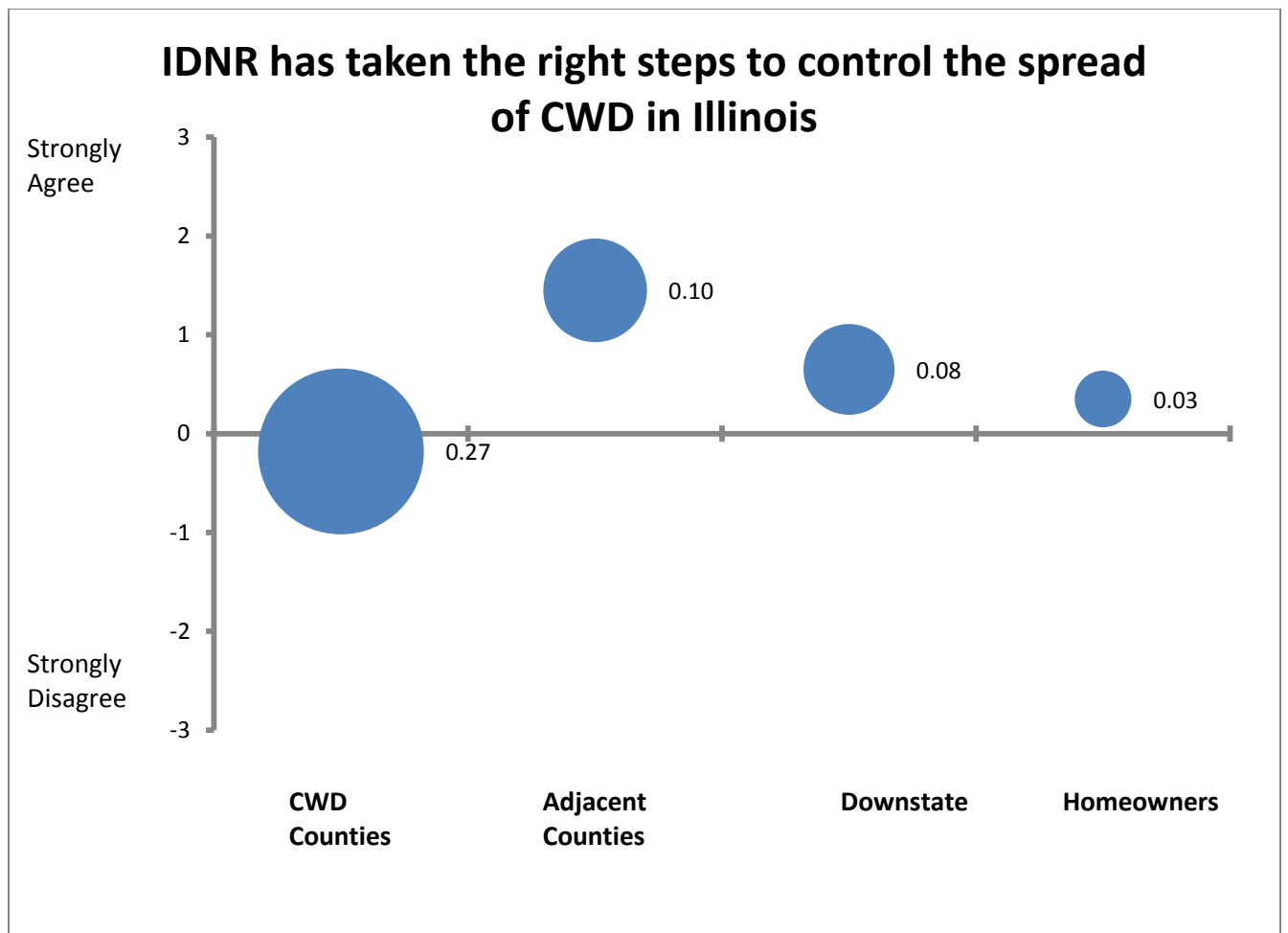


Figure 19. Potential for Conflict Index for beliefs that IDNR has taken the right steps to control the spread of CWD in Illinois.

Consensus between hunter groups was found for beliefs that hunters are more effective at managing CWD (Figure 20) than IDNR and that hunters can control CWD more effectively than sharpshooting (Figure 21). PCI analysis for all groups for both these belief statement show identical values and patterns, with the more positive beliefs being expressed by hunters in CWD counties, and hunters from downstate not sharing this belief to some extent.

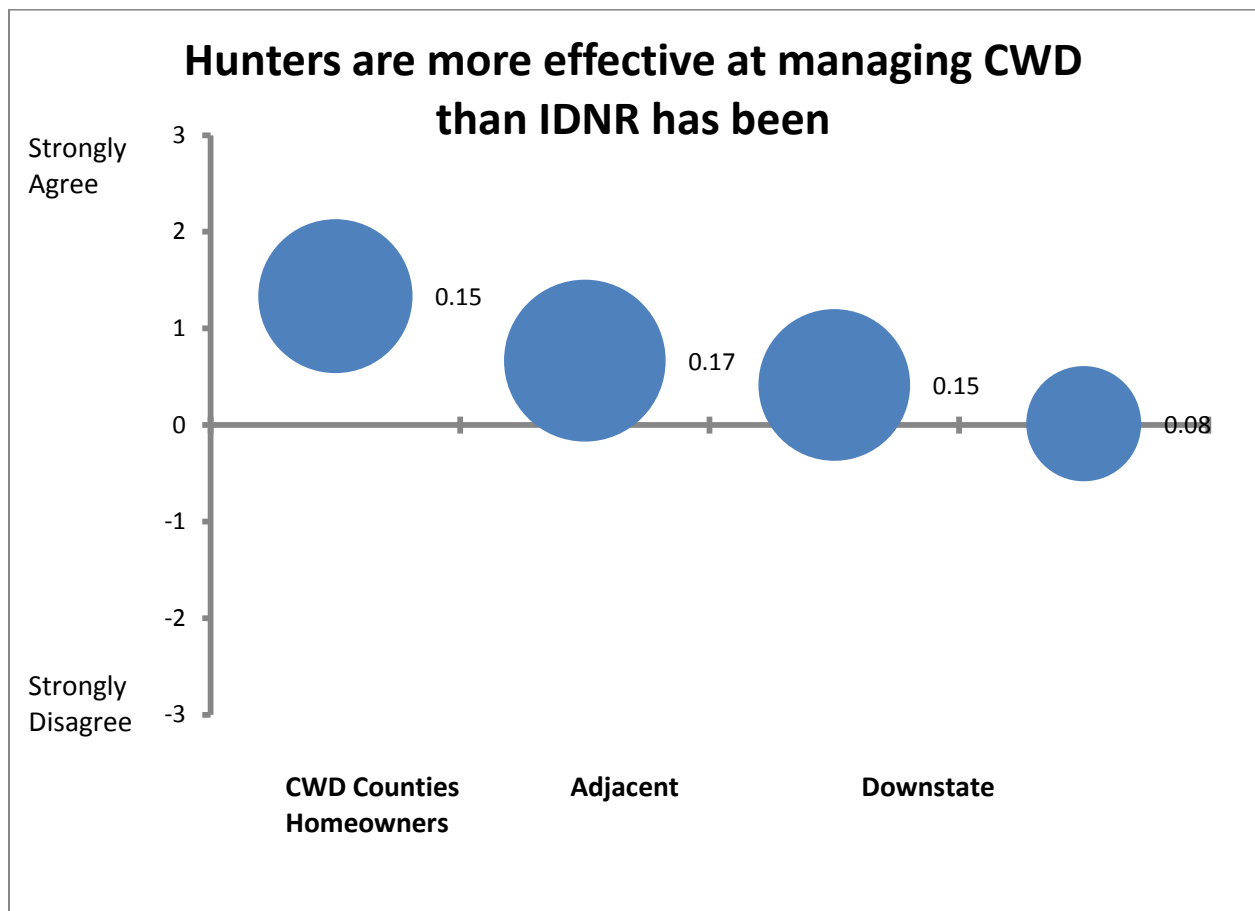


Figure 20. Potential for Conflict Index for beliefs that hunters are more effective at managing CWD than IDNR.

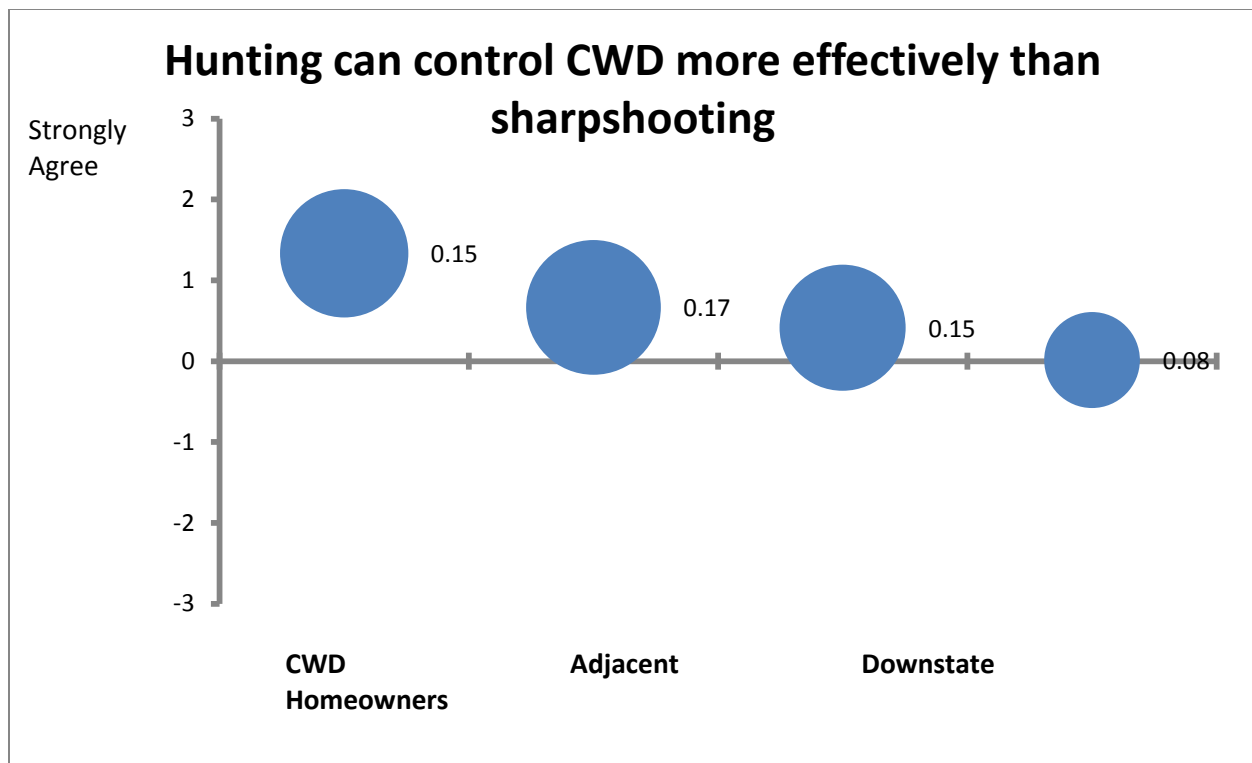


Figure 21. Potential for Conflict Index for beliefs that hunting can control CWD more effectively than sharpshooting.

PCI analyses of beliefs for three statements: “CWD must be controlled in northern IL even if it means having fewer deer”, “CWD will spread without sharpshooting operations in northern Illinois”, and IDNR’s sharpshooting program should continue until CWD is gone from the state” showed identical size and distribution of the graphical representations for each group (Figure 22-24). For each beliefs statement hunters from CWD-affected counties were in greater (although not complete) disagreement and had less consensus, whereas agreement (but not consensus) increased among hunters from adjacent counties and more so for hunters from the downstate group. Homeowners showed more consensus and a mean above the neutral line.

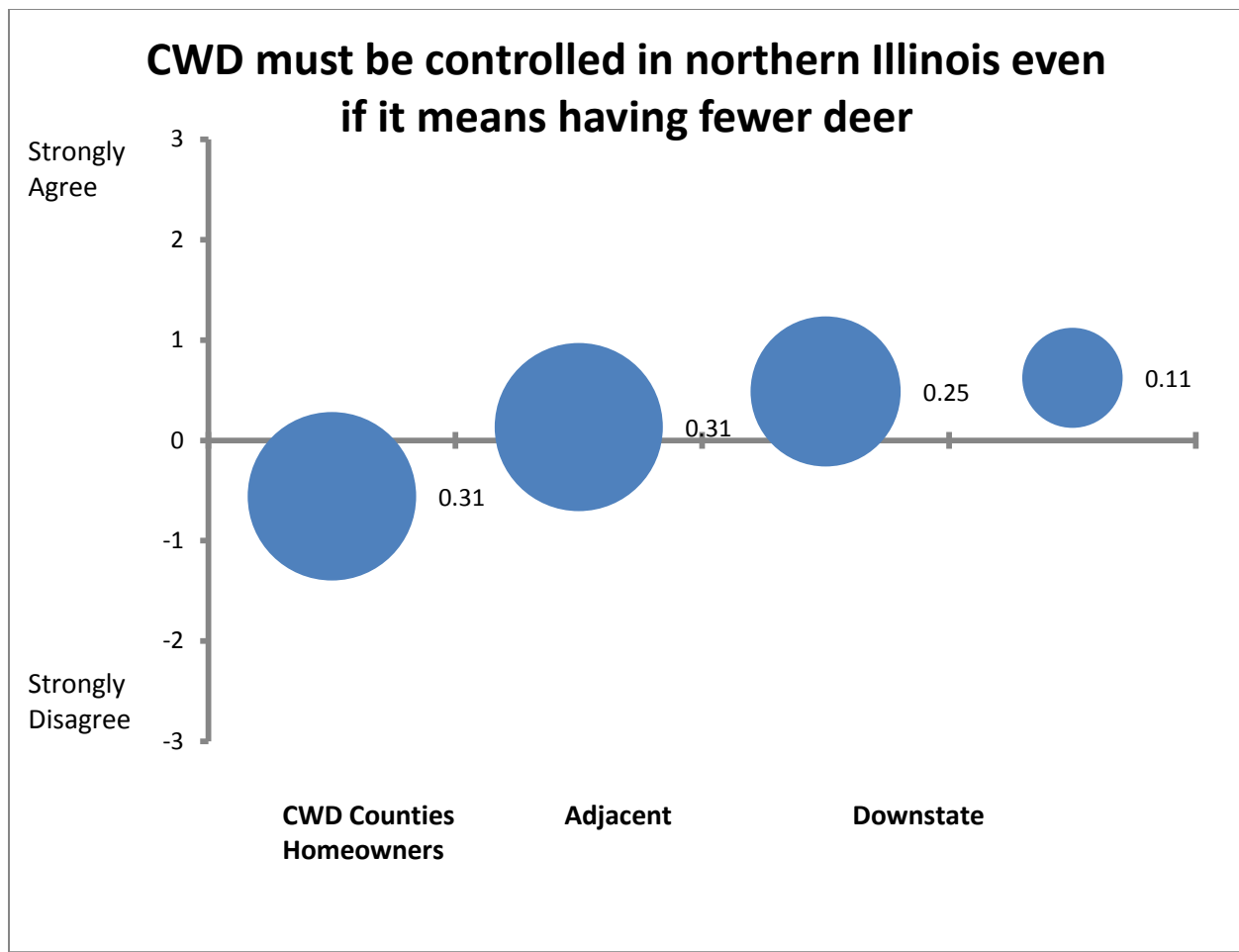


Figure 22. Potential for Conflict Index for beliefs that CWD must be controlled in northern Illinois even if it means having fewer deer.

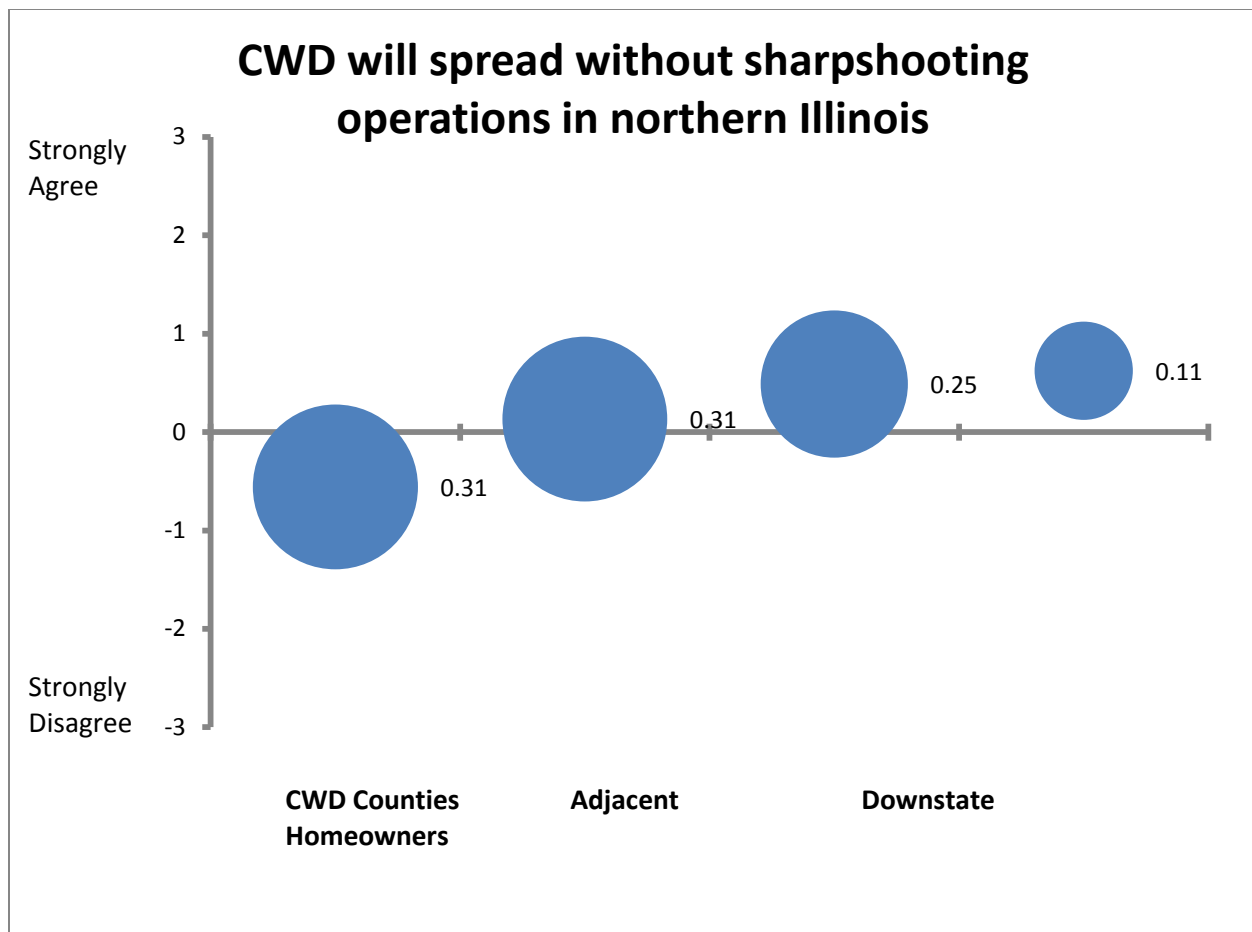


Figure 23. Potential for Conflict Index for beliefs that CWD will spread without sharpshooting operations in northern Illinois.

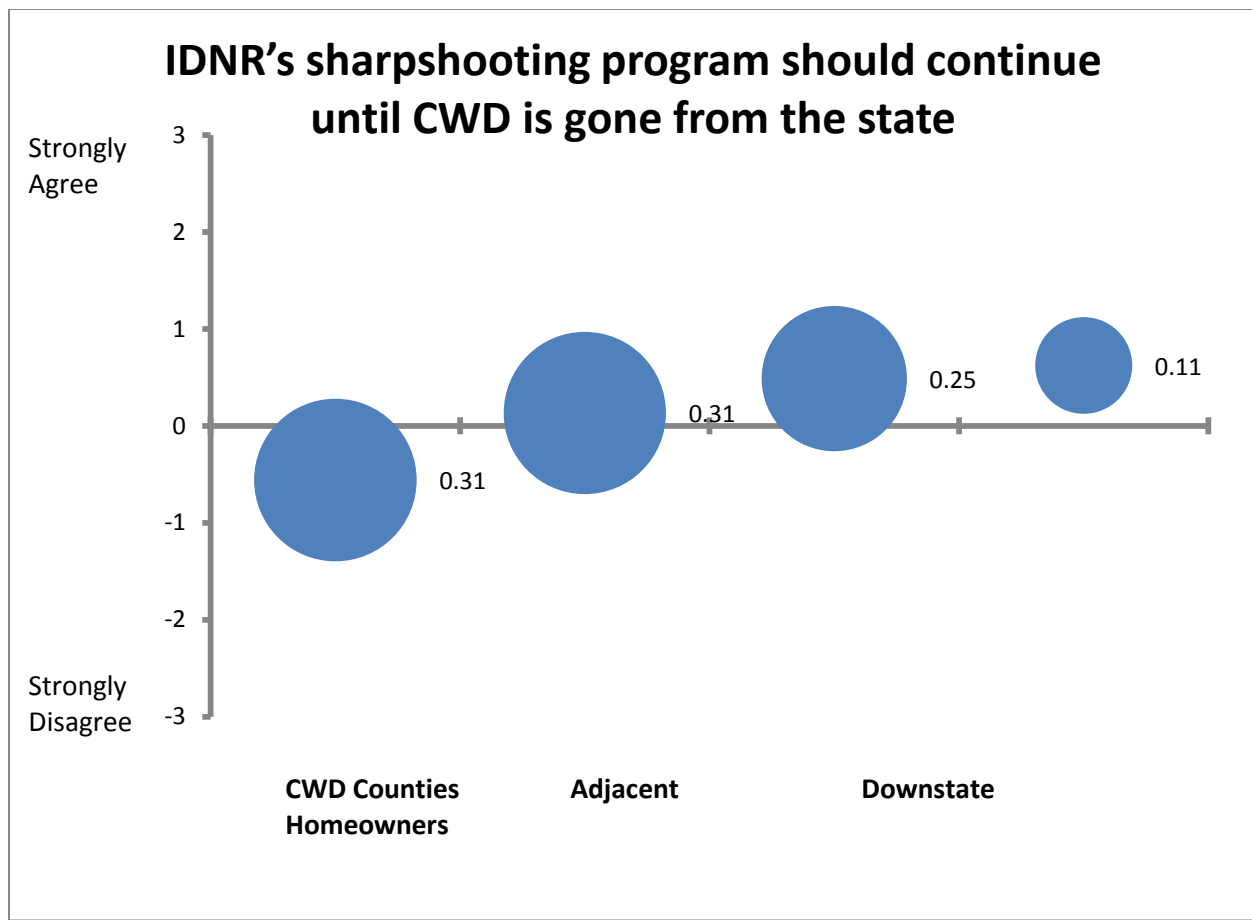


Figure 24. Potential for Conflict Index for beliefs that the IDNR sharpshooting program should continue until CWD is gone from the state.

Discussion

Perceived Importance of Factors Used in Setting Deer Population Goals

Overall health of the deer herd was reported by survey respondents as the most important factor in setting deer population goals of the seven factors examined. Substantial majorities, ranging from 70% to 86% across all four groups sampled rated this factor as very or extremely important. The second-highest rated factor was amount of disease found in the deer herd followed by impact of deer on their natural habitat, number of deer desired by hunters, number of deer-car collisions, and amount of damage caused by deer to agricultural crops. Survey respondents identified the number of deer acceptable to the general public as lowest in importance as a factor in setting populations goals. On closer examination some differences become apparent. Although a majority (55%) of hunters in counties affected by CWD rated the amount of disease in the deer herd as very or extremely important, this total was low compared to 81% of downstate hunters and 69% among both hunters in adjacent counties and homeowners. It may be likely that this perception is due to mixed support among hunters in these counties toward reduced deer populations resulting from CWD management. Further analyses of the data will be conducted to investigate this relationship.

Deer car collisions was favored by a greater percentage of homeowners than hunters, with 53% of homeowners citing this factor as very or extremely important in setting populations goals compared to less than half of hunters across the three hunter groups. This finding is not surprising, considering that this may be the only contact some homeowners have with deer in the area where they live. It should be noted that, even though it ranked lowest of the seven factors among the four groups in this study, it ranked third (behind overall health of deer herd – 70% and amount of disease in the herd – 69%) among homeowners.

ANOVA tests comparing means for each of the variables in this section were significant; however, tests for effect size of significance showed minimal significance. These findings suggest little difference in mean responses across the four groups, therefore ranking of importance for the various factors used to set populations goals for deer in Illinois are similar among hunters and homeowners.

Perceived Effectiveness of IDNR Management Actions in Reducing CWD

As items in this section were asked only of samples of hunters, discussion focuses on perceptions among hunters in these three groups. Significant differences in responses were found across the hunters groups. These differences were due mostly to pluralities of hunters in counties adjacent to CWD-affected counties and downstate responding that they were not sure, and these percentages were approximately twice those of hunters in CWD counties. Further, higher percentages of hunters in the CWD region perceived each of the four management approaches were not effective in reducing CWD in Illinois compared to hunters elsewhere in the state. Management actions receiving highest positive responses among hunters were special CWD hunts in CWD-affected counties and increased deer harvest; the action receiving the greatest percentage of hunter responses that it was not effective was sharpshooting in known CWD regions. These responses were consistent with those received in other sections of the questionnaire in which hunters expressed a desire to be the agents used to control CWD in Illinois.

Perceived Importance of IDNR Monitoring CWD in Illinois

Hunters in all groups provided a high degree of support for testing deer in CWD-affected counties. Responses progressing further from CWD counties exhibited greater support for testing deer in counties not affected by CWD, moreover approximately half of hunters across that state indicated that testing of a deer they personally harvested was important to them. These findings suggest testing deer for CWD receives widespread support among deer hunters. On a personal-risk level, mixed attitudes appear to exist regarding testing of deer harvested. Evaluation of such risk factors will depend on perceived risk of harvesting a deer with CWD, hunter's knowledge and understanding of CWD, and perceived risk to one's family (Miller and Shelby 2009). Further analysis of data from this study may provide insight into these attitudes.

Preferred Level of Action for IDNR to Pursue to Control CWD

Hunters expressed support for increased deer harvest in CWD-affected counties, with more than two-thirds of hunters in each of the three groups responding that IDNR should continue or increase this management action. It is important to note that a greater percentage of hunters in CWD counties supported going slower or stopping this action, and that this proportion was greater than that from hunters in either adjacent counties or downstate.

Use of sharpshooting showed greater disparity between the three groups. Support for sharpshooting as a management action increased with increased distance from CWD counties, and hunters preferring this action be stopped decreased to a corresponding degree. Opposition to sharpshooting was greatest among hunters in CWD counties – more than half expressed attitudes that this action be stopped. Between 20-25% of hunters elsewhere shared this same attitude. These findings support a similar pattern observed in perceived effectiveness of sharpshooting

deer in CWD-affected regions, responses for which also showed significant increased perceived effectiveness with respondents further from CWD counties.

Perceived Trust in IDNR for Managing CWD

Responses for items related to trust in IDNR were consistent relative to individual groups across item statements. In general, hunters in CWD counties expressed greater frequencies of mistrust of IDNR than hunters in the remaining groups or homeowners; however, with few exceptions, percentages of hunters in CWD-affected counties who disagreed with the statements often approximated 25% or less. When focusing on response patterns for trust statements it is important to be mindful that majorities of hunters and homeowners expressed some level of agreement with each trust statement, and for several statements (for example: “Provide the best available information on CWD in Illinois”) at least 60% to 70% of respondents across the four groups agreed. Responses to these items indicate high levels of trust in IDNR information and management of CWD in Illinois.

Hunter and Homeowner Beliefs About CWD in Illinois

Positive beliefs about the threat of CWD spreading to the deer herd statewide were widespread across all groups, with one-quarter of hunters in CWD-affected counties in disagreement. Divergent beliefs became apparent regarding potential of CWD to “wipe out deer herd across Illinois,” with two to four times as many hunters from CWD counties disagreeing strongly compared to hunters further from the affected counties. When we examined beliefs concerning the need to control CWD through reducing the deer population in northern Illinois, having fewer deer in northern Illinois as a result of proper CWD management, or potential

spread of CWD without sharpshooting operations we observed a different response pattern: more than half of hunters in CWD counties disagreed with those statements to some extent, whereas more hunters from groups further from CWD and homeowners tended to either agree or were not sure. Beliefs regarding continuation of the sharpshooting program until CWD is eradicated provided a clear example of these differences, as more than two-thirds of hunters from CWD-affected counties disagreed with the need to continue the program compared to 38% of hunters in adjacent counties, 24.2% from downstate, and 22.1% of homeowners.

The general pattern of beliefs across the statements provided was majorities of hunters in CWD-affected counties disagreed, whereas hunters in other groups and homeowners tended to agree to a greater extent or state they were unsure. As responses came from counties further from those affected by CWD, beliefs tended to be more positive toward potential threat of the disease, the need to control CWD, and current CWD management efforts and activities. Majorities from all hunter groups agreed that hunting should be used to control CWD.

Preferred IDNR action for controlling CWD and maintaining deer populations

Consistent with the patterns observed for other questionnaire sections (e.g., beliefs about CWD, preferred level of action, and perceived importance) preference for actions related to control of CWD relative to deer numbers divided between hunters in CWD-affected counties and those in adjacent or downstate counties. Overall, greater proportions of hunters (>60%) from outside the CWD counties preferred seeing fewer deer and lower odds of harvesting a CWD-positive deer compared with similar percentages of hunters in CWD counties choosing more deer with potentially greater odds at shooting a deer infected with CWD. Such differences in preferences suggest, on some level, most hunters in CWD counties have weighed the odds of

harvesting a deer with CWD and do not perceive the threat serious enough to warrant reduction of the deer population. To them, seeing more deer is of greater importance than the threat of harvesting a CWD-positive animal. As the means for population reduction focused on sharpshooting, use of this method served as a cue for opposition among hunters in CWD counties. Simply stated, patterns for expressed preferences by hunters in CWD counties were essentially mirror images of those by hunters elsewhere in the state.

Perceived Deer Population and Deer Harvest

Response patterns regarding perceptions of deer populations were similar across hunter groups. Generally speaking, hunters viewed deer populations and harvests in both Illinois and the counties they hunted as having decreased compared to five years prior to the study. Hunters from CWD-affected counties reported greater frequencies for each response category for decreased populations or harvest compared to hunters from the other groups.

Previous Knowledge of IDNR Actions in Response to CWD

Greater proportions of hunters responding from CWD counties reported they knew of various IDNR actions related to CWD management compared to hunters from adjacent or downstate counties. Responses suggest hunters closest to the CWD region perceive themselves to be informed about IDNR management actions to control CWD in Illinois.

Illinois Hunter and Homeowner Knowledge of CWD

Considering that survey participants were asked six questions pertaining to knowledge of CWD (responses = “Correct” or “Incorrect”) and given four participant groups (three hunter and one homeowner), there were a total of six possible correct responses for each of the four groups. Of this total, for only one statement - “CWD does not exist in Illinois” did respondents from every group respond accurately. Correct answers received a majority of responses for four other statements (three of these from hunters in CWD counties): 51.8% of hunters in CWD counties correctly stated that CWD was not found in every state, 53.2% responded that there is no cure for CWD, 66.9% that CWD was found in Wisconsin before Illinois (64% of hunters in counties adjacent to CWD counties and 49% of hunters from downstate correctly responded, as well). The response “I don’t know” received substantial responses and majorities for some groups across several statements. These results suggest that, although attitudes toward CWD are well-established, they are not necessarily based upon correct information. Such findings may not be surprising, but they do suggest that perhaps hunters may be unaware of the wealth of information that exists regarding CWD or that they may choose not to accept the information due to the source (i.e., IDNR). Further analysis may provide additional evidence of these possible explanations. Regardless of the reasons, hunters in particular did not identify the correct responses to most statements about CWD.

Perceived Risks of CWD and Related Illnesses and Diseases

A rating of perceived risks to six insect- and food-borne diseases and illnesses showed CWD as rated lowest among all risks provided. Majorities from three of the four groups perceived CWD as “No Risk” (45.1% of hunters in adjacent counties rated it as such). Slightly

more than one-third of all respondents perceived CWD as a “Slight Risk.” Lyme disease, *Salmonella*, and *E. coli* were perceived as a moderate to high risk by approximately one-third of respondents from each group and were therefore perceived as the greatest risks of the six factors presented to survey participants.

Potential for Conflict Index (PCI)

A general pattern was evident across all PCI analyses: Hunters in CWD counties tended to show fewer consensuses and were in greater disagreement in regard to statements supporting current IDNR actions to control CWD, potential for CWD to spread and impact the deer herd statewide, and reduction of deer populations to control CWD. Consensus increased and PCI means became more positive among respondents further from CWD counties. Homeowners consistently provided the greatest consensus among all groups. These findings suggest reliability across the same group regarding the various aspects of CWD. Fewer consensuses exists among hunters in the CWD counties over questions as to how to manage deer and the deer herd to control CWD, and greater agreement for these same facets is found among hunters further downstate. A high degree of reliability is seen for homeowners across these same questions, given the relative position and size of the PCI graphics.

Conclusion

This report provides results from one of the most extensive studies on public attitudes toward Chronic Wasting Disease conducted to date, and the most extensive for one state. A comprehensive assessment of attitudes, beliefs, and preferences for agency actions and deer management to control CWD were provided, and some common patterns emerged. Foremost among the findings is that deer hunters in counties affected by CWD show the least amount of consensus compared to hunters from those adjacent to CWD counties. For most questions examined, these hunters tended to disagree with statements supporting efforts to control the spread of CWD by reducing deer numbers, especially where sharpshooting was involved, to a significantly greater degree than hunters elsewhere in the state. Downstate hunters, by contrast, supported decreasing deer numbers and using sharpshooting to effect that reduction.

It is also important to state that most respondents did not have an accurate understanding of CWD. Responses on knowledge statements were mainly either wrong or the respondent did not know. In spite of the vast amount of information and the availability of such information, hunters remain generally uninformed about CWD. The most frequent response to the question asking for the number of positive cases of CWD (with response options provided) among hunters in CWD counties was “Don’t know” and 8.1% identified the correct category “301-500” as the number of positive cases in Illinois at the time underscores the lack of awareness hunters have about CWD. In general, homeowners were most likely to select “Don’t Know” or “Unsure” response categories for questionnaire statements measuring knowledge of CWD.

Overall, hunters are supportive of management approaches that use hunting to control deer and CWD. More hunters from adjacent counties, and an even greater percentage among

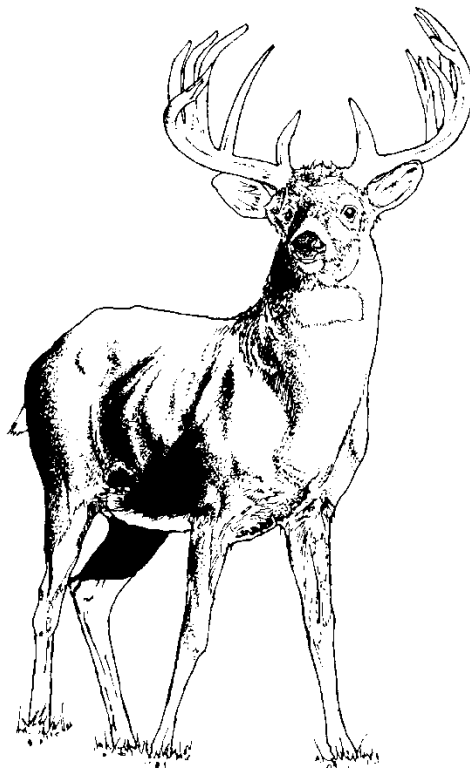
downstate hunters, supported use of sharpshooting and other reduction actions (e.g., holding special hunts, reduce deer populations in CWD counties) than hunters in counties affected by CWD. It is important to note, as was discussed above, whereas the attitudes of hunters in CWD counties favored or opposed a specific approach there was dissention among their ranks. More variation in responses occurred among hunters in CWD-affected counties than elsewhere in the state.

In summary, hunters and homeowners alike trusted IDNR to make sound management decisions based on science to control CWD in Illinois. They expressed trust in the information provided and supported actions taken by the agency. Dissenting attitudes and opposition existed more among hunters in the counties affected by CWD, but even among those hunters there existed a level of support among a large minority.

- Holsman, R.H., J. Petchenik and E.E. Cooney (2010) CWD After “the fire”: Six Reasons Why Hunters Resisted Wisconsin’s Eradication Effort. *Human Dimensions of Wildlife*, 15: 180-193.
- Lyon, K.M. and J.J. Vaske (2010) Predicting Hunting Participation in Response to Chronic Wasting Disease in Four States. *Human Dimensions of Wildlife*, 15:3, 208-220.
- Miller, C.A. (2004) Deer Hunter Participation and Chronic Wasting Disease in Illinois: An assessment at Time Zero. *Human Dimensions of Wildlife* , 9:237-239.
- Needham, M.D. and J.J. Vaske (2008) Hunter perceptions of similarity and trust in wildlife agencies and personal risk associated with Chronic Wasting Disease. *Human Dimensions of Wildlife*, 21:197-214.
- Vaske, J.J., J. Beaman, H. Barreto, and L.B. Shelby (2010) An extension and further validation of the Potential for Conflict Index. *Leisure Sciences*, 32:240-254.
- Vaske, J.J., M.D. Needham, P. Newman, M.J. Manfredo, and J. Petchenik (2006) Potential for Conflict Index: Hunters’ response to Chronic Wasting Disease. *Wildlife Society Bulletin*, 34:44-50.

Appendix A.

Northern Illinois Deer Hunter Survey



Illinois Department of Natural Resources
Division of Wildlife Resources
and
Illinois Natural History Survey



The Department of Natural Resources is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the Illinois Compiled Statutes, The Wildlife Code, Chapter 520. Disclosure of information is voluntary. This study is funded by the federal Wildlife Restoration Fund through your purchase of hunting arms and ammunition.

THANK YOU FOR YOUR COOPERATION

All of your responses will be kept confidential.
Please return this survey in the postage-paid return envelope provided

Section 1. Hunting Experience. Please complete the following questions related to your deer hunting experience in Illinois.

1. Did you hunt deer during any of the 2011-12 Illinois deer seasons (archery, shotgun, muzzleloader, etc.)?

_____ Yes _____ No (Please go to *Question 1a*).

1a. If "No," please give the **most recent year** you hunted deer in Illinois. Please write the license year (year of the fall archery/shotgun/muzzleloader seasons) for the last year you hunted deer in Illinois.

_____ year (Please go to *Question 5*)

2. In the table below please give the number of deer you harvested **in Illinois**, counties hunted, number of days hunted, and county you hunted **most often** between October 1, 2011-January 15, 2012. Count only deer you retrieved; do not count deer you were not able to retrieve. **Count any part of a day hunted as 1 day.**

	# of <u>Antlered</u> Deer Harvested	# of <u>Antlerless</u> Deer Harvested	Counties Hunted	Total Days Hunted	County Hunted <u>Most Often</u>
Archery Seasons	_____	_____	_____	_____	_____
Regular Firearm Season	_____	_____	_____	_____	_____
Muzzleloader-only Season	_____	_____	_____	_____	_____
Late-winter Firearm Season	_____	_____	_____	_____	_____
Special CWD season	_____	_____	_____	_____	_____

3. How does the number of deer **you saw** during the **2011-2012 season(s)** compare to 5 years ago? Please circle the number that matches your response.

Decreased Considerably	Decreased Moderately	Decreased Slightly	No Change	Increased Slightly	Increased Moderately	Increased Considerably
1	2	3	4	5	6	7

4. How does the number of deer **you harvested** during the **2011-2012 season(s)** compare to 5 years ago? Please circle the number that matches your response.

Decreased Considerably	Decreased Moderately	Decreased Slightly	No Change	Increased Slightly	Increased Moderately	Increased Considerably
1	2	3	4	5	6	7

5. About how many deer have **you harvested in Illinois during the past 5 years**? Count only deer you retrieved; do not count deer you were not able to retrieve.

	Antlered				Antlerless			
Archery Seasons	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___
Firearm Seasons	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___
Muzzleloader-only Seasons	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___
Late-winter Firearm Seasons	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___
Special CWD Seasons	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___	___ 0 ___	___ 1-4 ___	___ 5-8 ___	___ >8 ___

6. Please give your opinion of the deer population in the county where you hunted deer most often. Circle the number that matches your response.

Too Low	Low	About Right	High	Too High
1	2	3	4	5

7. How do you think the **total** deer harvest in the county where you hunted deer most often has changed over the past 5 years? Please circle the number that matches your response.

Decreased Considerably	Decreased Moderately	Decreased Slightly	No Change	Increased Slightly	Increased Moderately	Increased Considerably
1	2	3	4	5	6	7

8. Do you think the **total deer harvest in Illinois** over the past 5 years has decreased or increased? Please circle the number that matches your response.

Decreased Considerably	Decreased Moderately	Decreased Slightly	No Change	Increased Slightly	Increased Moderately	Increased Considerably
1	2	3	4	5	6	7

9. In your opinion, to what extent should the following be considered in setting deer population goals in Illinois? Please circle the number that matches your response.

	Not Important	Somewhat Important	Moderately Important	Very Important	Extremely Important
The number of deer acceptable to the general public	1	2	3	4	5
The amount of disease in the deer herd	1	2	3	4	5
The number of deer-vehicle collisions	1	2	3	4	5
The number of deer desired by hunters	1	2	3	4	5
The amount of damage done by deer to agricultural crops	1	2	3	4	5
The impact of deer on their natural habitat	1	2	3	4	5
The overall health of the deer herd	1	2	3	4	5

Section 2. Chronic Wasting Disease in Illinois. Please complete the following questions related to Chronic Wasting Disease (CWD) in ILLINOIS and management actions by the Illinois Department of Natural Resources (IDNR).

1. Do you live in a county in which CWD has been found in deer? _____ Yes _____ No

_____ Not sure

2. Please indicate if you think the following statements are correct or incorrect by circling a number in the appropriate location.

Statement	Correct	Incorrect	I don't know
CWD has always been present in the Illinois deer herd	1	2	3
CWD is found in every state	1	2	3
CWD is a fatal disease to every deer infected	1	2	3
There is no known cure for CWD in deer	1	2	3
CWD does not exist in Illinois	1	2	3
CWD was found in Wisconsin before Illinois	1	2	3

3. How much risk do you feel from the following? Please circle the number that matches your response.

	No Risk	Slight Risk	Moderate Risk	High Risk
Contracting Lyme Disease	1	2	3	4
Becoming ill from Chronic Wasting Disease	1	2	3	4
Becoming ill from Salmonella food poisoning	1	2	3	4
Becoming ill from E. coli food poisoning	1	2	3	4
Contracting Rabies	1	2	3	4
Contracting West Nile Virus	1	2	3	4
Contracting Mad Cow (BSE) Disease	1	2	3	4

4. How many deer **statewide** do you believe have tested positive for CWD in the past 10 years in Illinois?

____ 0 ____ 1-10 ____ 11-50 ____ 51-100
 ____ 101-300 ____ 301-500 ____ 501-1,000 ____ > 1,000 ____ Don't know

5. Please tell us if you knew (before receiving this questionnaire) about each action below that was taken by IDNR in response to CWD by circling the number that matches your response.

IDNR Action	Yes, I knew this	No, I did not know this
Increased the number of deer permits available for hunting in CWD-affected counties	1	2
Conducting deer sharpshooting in known CWD areas to supplement hunting	1	2
Testing deer harvested by hunters in CWD-affected counties	1	2
Holding special CWD management hunts in CWD-affected counties	1	2
Testing deer from counties NOT affected by CWD	1	2
Reduce populations of deer in CWD-affected counties	1	2
Banned the feeding of wild deer	1	2
Funding research about CWD and its spread	1	2

6. How effective do you feel the following IDNR management actions have been in reducing CWD in deer? Please circle the number that matches your response.

Management Action	Not at all effective	Slightly effective	Somewhat effective	Effective	Very Effective	I am not sure
Increased deer harvest through hunting in CWD-affected counties	1	2	3	4	5	6
Used deer sharpshooting in known CWD areas to supplement hunting	1	2	3	4	5	6
Reduced populations of deer in CWD-affected counties	1	2	3	4	5	6
Held special CWD management hunts in CWD-affected counties	1	2	3	4	5	6

7. IDNR annually tests thousands of deer from throughout the state to monitor where CWD is in Illinois. In your opinion, how important is this surveillance for each of the following purposes? Please circle the number that matches your response.

	Not Important	Somewhat Important	Moderately Important	Very Important	Extremely Important
Testing of deer in CWD counties to monitor local distribution and the percent of deer with the illness	1	2	3	4	5
Testing of deer in non-CWD counties to determine whether CWD has spread to new areas	1	2	3	4	5
Testing of YOUR deer so that you can decide whether you should eat it	1	2	3	4	5

8. In your opinion, to what level do you think IDNR should pursue the actions listed below? Please circle the number that matches your response.

Action	Stop this action	Go slower with this action	Continue with this action	Increase the level of this action
Increase deer harvest through hunting in CWD-affected counties	1	2	3	4
Use deer sharpshooting in known CWD areas to supplement hunting	1	2	3	4
Testing deer harvested by hunters in CWD-affected counties	1	2	3	4
Holding special CWD management hunts in CWD-affected counties	1	2	3	4
Reduce populations of deer in CWD-affected counties	1	2	3	4
Testing deer harvested by hunters from counties NOT affected by CWD	1	2	3	4

9. Please rate your level of acceptance for each of the following management actions and potential outcomes by circling the number that matches your response.

Management Action	Completely Unacceptable	Somewhat Unacceptable	Unsure	Somewhat Acceptable	Completely Acceptable
Increase deer harvest through hunting in CWD-affected counties	1	2	3	4	5
<u>Slightly</u> decrease deer harvest through hunting in CWD-affected counties	1	2	3	4	5
<u>Significantly</u> decrease deer harvest through hunting in CWD-affected counties	1	2	3	4	5
Use deer sharpshooting in known CWD areas to supplement hunting	1	2	3	4	5
Holding special CWD management hunts in CWD-affected counties	1	2	3	4	5
Take no action to manage CWD	1	2	3	4	5

Potential Outcome	Completely Unacceptable	Somewhat Unacceptable	Unsure	Somewhat Acceptable	Completely Acceptable
Reduced populations of deer in CWD-affected counties	1	2	3	4	5
Seeing fewer deer because of CWD management	1	2	3	4	5
Decreased hunter harvests of deer in CWD-affected counties	1	2	3	4	5

10. Please choose **one response** from **each** of the **3 pairs below** that best matches your opinions about deer management in northern Illinois. Please check the statement that agrees most with your opinion.

Pair A

- ____ I favor ending IDNR sharpshooting with a higher likelihood of CWD spreading to more counties.
- ____ I favor continuing IDNR sharpshooting to reduce the likelihood of CWD spreading to more counties.

Pair B

- ____ I prefer more deer in the areas I hunt, even if it means a greater chance of shooting a deer with CWD.
- ____ I prefer fewer deer in the areas I hunt to have a lower chance of shooting a deer with CWD.

Pair C

- ____ Having a higher population of deer in Northern Illinois is better than sharpshooting deer to control the spread of CWD.
- ____ Continued sharpshooting to reduce the population of deer in Northern Illinois is better than having CWD spread.

11. Which of the following strategies do you feel is the **most important** for IDNR to take in managing CWD in deer in Illinois? Please check **one** response.

- ☐ Monitor CWD distribution and rate of infection, but take no action to manage it
- ☐ Use existing hunting seasons alone to manage CWD
- ☐ Use all methods necessary to manage CWD
- ☐ Take no action and let nature take its course
- ☐ I am not sure

12. Because of CWD, how concerned are you about each of the following issues? Please circle the number that matches your response.

<i>Because of CWD</i> , how concerned are you about...	Not at all Concerned		Slightly Concerned		Moderately Concerned		Extremely Concerned	
...your own personal health?	1	2	3	4	5	6	7	8
... the health of the deer population in Illinois?	1	2	3	4	5	6	7	8
...not having enough healthy deer left to hunt in Illinois?	1	2	3	4	5	6	7	8
...CWD spreading throughout the entire deer population in Illinois?	1	2	3	4	5	6	7	8
...the potential for CWD to dramatically reduce the deer population in Illinois?	1	2	3	4	5	6	7	8
... the potential for CWD to kill the entire deer population in Illinois?	1	2	3	4	5	6	7	8

13. How much do you disagree or agree with each of the following statements related to CWD? Please circle the number for each statement that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
The threat of CWD has been exaggerated.	1	2	3	4	5	6	7
Because of CWD, members of my family have concerns about eating deer meat.	1	2	3	4	5	6	7
CWD poses a risk to deer, but not to humans.	1	2	3	4	5	6	7
CWD may pose a risk to humans, but not enough is currently known to be sure.	1	2	3	4	5	6	7
CWD may cause disease in humans if they eat meat from animals infected with CWD.	1	2	3	4	5	6	7
Because of CWD, I have concerns about eating deer meat.	1	2	3	4	5	6	7

14. Please give your opinion about the amount of resources (time/money/personnel) the IDNR should commit toward controlling the spread of Chronic Wasting Disease? **(Please check one)**

- ☐ They should commit more resources
☐ They should commit fewer resources
☐ They currently commit just the right amount of resources
☐ I am not sure

15. Thinking about IDNR's approach to control CWD in the deer herd, do you believe the plan has been...?
(Please check one):

- ☐ Not aggressive enough ☐ Too aggressive
☐ About right ☐ I am not sure

16. If sharpshooting is the most effective method in controlling the spread of CWD in Illinois, please give your opinion of the sharpshooting program by selecting one of the responses below.

- ☐ I feel it should be increased ☐ I feel it should stay as it is
☐ I feel it should be decreased ☐ I feel it should be eliminated

17. To what extent do you disagree or agree with each of the following statements regarding your **trust** in IDNR. **(Please circle one number for each statement that most closely matches your response)**

I trust IDNR to....	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
... provide me with enough information to decide what actions I should take regarding CWD	1	2	3	4	5	6	7
... provide the best available information on CWD in Illinois	1	2	3	4	5	6	7
... make good deer management decisions regarding CWD issues	1	2	3	4	5	6	7
... provide adequate opportunities to listen to hunters' concerns about CWD	1	2	3	4	5	6	7
... provide timely information regarding CWD issues	1	2	3	4	5	6	7
... provide truthful information about human safety issues related to CWD	1	2	3	4	5	6	7
... provide truthful information about deer population estimates	1	2	3	4	5	6	7
... provide truthful information about how CWD spreads	1	2	3	4	5	6	7
... provide truthful information on the number of CWD-positive deer discovered in Illinois	1	2	3	4	5	6	7
... follow the best available science in managing CWD	1	2	3	4	5	6	7
... properly address CWD in Illinois	1	2	3	4	5	6	7

18. Please state how much you disagree or agree with the following statements about CWD in Illinois by circling the number that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
If left unchecked, CWD could spread throughout the Illinois deer herd.	1	2	3	4	5	6	7
If left unchecked, CWD could wipe out the deer herd across Illinois.	1	2	3	4	5	6	7
We should reduce the deer population in northern Illinois as much as needed to control CWD.	1	2	3	4	5	6	7
Hunters are more effective at managing CWD than IDNR has been.	1	2	3	4	5	6	7
CWD is natural and we should let it take its course in deer.	1	2	3	4	5	6	7
IDNR is exaggerating the risk CWD-infected venison poses to my health.	1	2	3	4	5	6	7
We should eliminate CWD from the deer population.	1	2	3	4	5	6	7
IDNR has taken the right steps to control the spread of CWD in Illinois.	1	2	3	4	5	6	7
Hunting can control CWD more effectively than sharpshooting.	1	2	3	4	5	6	7
CWD must be controlled in northern Illinois even if it means having fewer deer.	1	2	3	4	5	6	7
CWD is a serious threat to the deer herd in Illinois.	1	2	3	4	5	6	7
CWD will spread without sharpshooting operations in northern Illinois.	1	2	3	4	5	6	7
IDNR's sharpshooting program should continue until CWD is gone from the state.	1	2	3	4	5	6	7
IDNR's CWD management is similar to Wisconsin DNR.	1	2	3	4	5	6	7

19. The presence of CWD may change deer hunting for some deer hunters. Please use the statements below to provide your response to each scenario and circle the number that matches your response in the space provided.

In the county where you hunt, what would you do if CWD is found in...	I will hunt as usual, and...				I will <u>NOT</u> hunt as usual, and...		
	...eat deer meat if I harvest a deer	... eat deer meat, but my family will not	... not eat deer meat	... only eat deer meat if I am first able to have it tested for CWD	...hunt deer in a different county	... not hunt deer in Illinois, but will go out of state to hunt deer	... not go deer hunting at all
... 1 out of 1,000 deer	1	2	3	4	5	6	7
... 1 out of 100 deer	1	2	3	4	5	6	7
... 1 out of 10 deer	1	2	3	4	5	6	7
... 2 out of 10 deer	1	2	3	4	5	6	7
... 3 out of 10 deer	1	2	3	4	5	6	7
... 5 out of 10 deer	1	2	3	4	5	6	7
... 10 out of 10 deer	1	2	3	4	5	6	7

20. In what county did you hunt deer most often 10 years ago? _____ County

21. If the county in which you hunted deer most often during the 2011-12 deer season **is different** than the county in #20, please give the reasons for hunting in the different county by checking **all that apply**.

☐ I lost my deer hunting spot
 ☐ I moved my deer hunting spot due to presence of CWD
☐ The new spot is closer to home or work
 ☐ There's better deer hunting in the new spot
☐ I live somewhere else now
 ☐ My hunting partners are hunting in the new spot
☐ I now hunt a lease
 ☐ I purchased land for hunting
☐ I have permission to hunt private land
 ☐ It's easier to get a permit for the new spot
☐ Other (*please identify*): _____

22. Have you ever had a deer you harvested tested for CWD?

☐ Yes, every deer
 ☐ No, none of my deer (Please go to Section 3)
☐ Yes, some deer
 ☐ No, because I have not harvested a deer (Please go to Section 3)

23. If "Yes," did any of your deer test positive for CWD? ☐ Yes ☐ No

24. If "Yes," which of the following **best** describes what you did with the meat?

☐ My family and I ate it
 ☐ I threw it out
☐ I ate it, but my family did not
 ☐ I donated it to a food pantry
☐ IDNR picked up and disposed of meat
 ☐ Other (Please identify): _____

Section 3. Attitudes Toward Deer Hunting. Please state if you agree or disagree with the following statements by circling the number that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
I could not substitute any other activity for deer hunting.	1	2	3	4	5	6	7
I spend a lot of time in the off-season planning for deer hunting.	1	2	3	4	5	6	7
Harvesting a trophy buck is an important part of why I hunt deer.	1	2	3	4	5	6	7
I plan vacation time around deer seasons.	1	2	3	4	5	6	7
I usually shoot at the first legal deer, regardless of buck or doe.	1	2	3	4	5	6	7
I feel Illinois should have antler restrictions to produce bucks with higher scoring racks.	1	2	3	4	5	6	7
Deer hunting determines much of my lifestyle.	1	2	3	4	5	6	7
I hunt deer to put meat in the freezer.	1	2	3	4	5	6	7
Harvesting a big buck is a measure of a hunter's skill.	1	2	3	4	5	6	7
I spend a lot of time before the season scouting the area I will hunt.	1	2	3	4	5	6	7
Emphasis on trophy bucks has ruined deer hunting.	1	2	3	4	5	6	7
More emphasis should be placed on producing trophy deer.	1	2	3	4	5	6	7
I would rather go deer hunting than do any other recreation.	1	2	3	4	5	6	7
Deer managers should focus on providing bucks with large racks.	1	2	3	4	5	6	7
I hunt deer for the challenge.	1	2	3	4	5	6	7
It takes skill to harvest deer.	1	2	3	4	5	6	7
I usually pass on shots at does in order to take a buck.	1	2	3	4	5	6	7
Harvesting smaller bucks will help produce a healthy herd.	1	2	3	4	5	6	7

Section 4. Background. The following questions are important to help us understand more about the people involved in deer hunting in Illinois. All responses are kept confidential.

1. What is your county of residence? _____ County
2. Please give your age. _____ years
3. What is your gender? _____ Male _____ Female
4. About how many years total have you hunted deer? _____ years
5. About how many years have you hunted deer in Illinois? _____ years
6. Which of the following describes how often you hunt deer in Illinois? Choose one.
_____ every year _____ most years _____ some but not most years
- 6a. If you don't hunt every year, do you buy an Illinois hunting license each year?
_____ Yes _____ No
- 6b. If you don't hunt every year, please choose the statements below that describes your reason(s) for not hunting. (Please check all that apply)
_____ Fewer deer where I hunt _____ Didn't draw a permit
_____ Too expensive _____ Lost interest
_____ No access to places to hunt _____ Not enough time
_____ Deer hunting takes too much effort _____ Poor health
_____ Other (*Please identify*): _____
7. Have you (as an Illinois resident) **hunted deer (any species) or elk** as a nonresident in a state other than Illinois?
_____ Yes _____ No (Please go to **question 10**)
- 7a. In which state(s) have you hunted?: _____
8. What type of deer or elk hunting did you do in other states? Please check all that apply.
_____ firearm _____ archery _____ muzzleloader
9. How often did you hunt deer or elk in another state? Please check one response.
_____ more than 10 seasons _____ 2 - 5 seasons
_____ more than 5 seasons, but less than 10 _____ one season
10. Do you plan to hunt deer or elk in another state in the upcoming year (2012)?
_____ Yes Which state(s)?: _____
_____ No

11. If you could have only one day to hunt, which of the following would you hunt? Please **check ONE** response.

☐ ducks ☐ geese ☐ deer (archery) ☐ deer (firearm)
☐ furbearers ☐ pheasants ☐ quail ☐ squirrels
☐ rabbits ☐ doves ☐ turkeys
☐ others (please identify): _____

12. Are you aware of Wisconsin DNR's CWD management program?

☐ Yes ☐ No

12a. If "Yes," please give your opinion of Wisconsin DNR's CWD management program by circling the number that matches your opinion.

Very Poor	Poor	Neutral	Good	Very Good
1	2	3	4	5

Comments



THANK YOU FOR YOUR TIME AND ASSISTANCE!
Please return this survey in the postage-paid envelope provided.

The Illinois Department of Natural Resources receives federal assistance and therefore must comply with federal anti-discrimination laws. In compliance with the Illinois Human Rights Act, the Illinois Constitution, Title VI of the 1964 Civil Rights Act, Section 504 of the Rehabilitation Act as amended, and the U.S. Constitution, the Illinois Department of Natural Resources does not discriminate on the basis of race, color, sex, national origin, age, or disability. If you believe you have been discriminated against in any program, activity, or facility, please contact the Equal Employment Opportunity Officer, Department of Natural Resources, One Natural Resources Way, Springfield, IL 62701-1787, (217) 782-7616 or the Officer of Human Resources, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

Appendix B

Northern Illinois Deer Survey



Illinois Department of Natural Resources
Division of Wildlife Resources
and
Illinois Natural History Survey



The Department of Natural Resources is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the Illinois Compiled Statutes, The Wildlife Code, Chapter 520. Disclosure of information is voluntary. This study is funded by the federal Wildlife Restoration Fund through your purchase of hunting arms and ammunition.

THANK YOU FOR YOUR COOPERATION
All of your responses will be kept confidential.

Please return this survey in the postage-paid return envelope provided

The Illinois Department of Natural Resources (IDNR) is conducting a study of Illinois residents and white-tailed deer in northern Illinois. Please take 15 minutes of your time to complete this questionnaire. Your responses will provide valuable information for managing white-tailed deer.

Section 1. Chronic Wasting Disease in Illinois. Chronic Wasting Disease (CWD) is a disease of deer, elk, and moose that causes degeneration of the brain. Please complete the following questions related to Chronic Wasting Disease (CWD) in ILLINOIS.

1. Before receiving this survey, were you aware that Chronic Wasting Disease (CWD) had been found in deer in Illinois?

_____ Yes _____ No

2. Do you live in a county in which CWD has been found in deer? ____ Yes ____ No ____ I'm not sure

3. Have you ever hunted deer? _____ Yes _____ No (Please go to **Question 4**)

3a. Have you hunted deer in the past 5 years? _____ Yes _____ No

3b. What year was the last year you hunted deer in Illinois? _____ Year

3c. Recall the last season you hunted deer. In which county did you hunt deer most often?

_____ County

4. Does anyone in your household hunt deer? _____ Yes _____ No _____ Not anymore

5. Please indicate if you think the following statements are correct or incorrect by circling the number that matches your response.

Statement	Correct	Incorrect	I don't know
CWD has always been present in the Illinois deer herd	1	2	3
CWD is found in every state	1	2	3
CWD is a fatal disease to every deer infected	1	2	3
There is no known cure for CWD in deer	1	2	3
CWD does not exist in Illinois	1	2	3
CWD was found in Wisconsin before Illinois	1	2	3

6. How many deer **statewide** do you believe have tested positive for CWD in the past 10 years in Illinois?

_____ 0 _____ 1-10 _____ 11-50 _____ 51-100
 _____ 101-300 _____ 301-500 _____ 501-1,000 _____ > 1,000 _____ Don't know

7. Please describe the deer population in the county where you live. Circle the number that matches your response.

Too Low	Low	About Right	High	Too High
1	2	3	4	5

8. Please indicate how much risk you feel from the following by circling the number that matches your response.

	No Risk	Slight Risk	Moderate Risk	High Risk
Contracting Lyme Disease	1	2	3	4
Becoming ill from Chronic Wasting Disease	1	2	3	4
Becoming ill from Salmonella food poisoning	1	2	3	4
Becoming ill from E. coli food poisoning	1	2	3	4
Contracting Rabies	1	2	3	4
Contracting West Nile Virus	1	2	3	4
Contracting Mad Cow (BSE) Disease	1	2	3	4

9. How does the number of deer **you saw in the county where you live** during 2011 compare to 5 years ago?
Please circle the number that matches your response.

Decreased Considerably	Decreased Moderately	Decreased Slightly	No Change	Increased Slightly	Increased Moderately	Increased Considerably
1	2	3	4	5	6	7

10. How would you like to see deer numbers change in the county where you live during the next 5 years?
Please circle the number that matches your response.

Decrease Considerably	Decrease Moderately	Decrease Slightly	No Change	Increase Slightly	Increase Moderately	Increase Considerably
1	2	3	4	5	6	7

11. How do you feel about deer in the area where you live? Please circle the number that matches your response.

I <u>dislike</u> deer, because of the problems they cause		I am undecided about deer		I <u>like</u> deer, regardless of the problems they cause
1	2	3	4	5

12. Which of the following strategies do you feel is the **most important** for IDNR to take in managing CWD in deer in Illinois? Please check **one** response.

- ___ Monitor CWD distribution and rate of infection, but take no action to manage it.
- ___ Use existing hunting seasons alone to manage CWD
- ___ Use all methods necessary to manage CWD
- ___ Take no action and let nature take its course
- ___ I am not sure

13. Please tell us if you knew (before receiving this questionnaire) about each action below taken by IDNR in response to CWD by circling the number that matches your response.

IDNR Action	Yes, I knew this	No, I did not know this
Increased the number of deer permits available for hunting in CWD-affected counties	1	2
Conducting deer sharpshooting in known CWD areas to supplement hunting	1	2
Testing deer harvested by hunters in CWD-affected counties	1	2
Holding special CWD management hunts in CWD-affected counties	1	2
Testing deer from counties NOT affected by CWD	1	2
Reduce populations of deer in CWD-affected counties.	1	2
Banned the feeding of wild deer	1	2
Funding research about CWD and its spread	1	2

14. Because of CWD, how concerned are you about each of the following issues? Please circle the number that matches your response.

<i>Because of CWD</i> , how concerned are you about...	Not at all Concerned		Slightly Concerned		Moderately Concerned		Extremely Concerned	
...your own personal health?	1	2	3	4	5	6	7	8
... the health of your family?	1	2	3	4	5	6	7	8
...the health of the deer population in Illinois?	1	2	3	4	5	6	7	8
...not having enough healthy deer in Illinois?	1	2	3	4	5	6	7	8
...CWD spreading throughout the entire deer population in Illinois?	1	2	3	4	5	6	7	8
...safety issues surrounding sharpshooting to reduce CWD?	1	2	3	4	5	6	7	8
...CWD being transmitted to other animals?	1	2	3	4	5	6	7	8

15. In your opinion, to what extent should IDNR consider the following when setting goals for the size of the deer population in Illinois? Please circle the number that matches your response.

	Not Important	Somewhat Important	Moderately Important	Very Important	Extremely Important
The number of deer acceptable to the general public	1	2	3	4	5
The amount of disease in the deer herd	1	2	3	4	5
The number of deer-vehicle collisions	1	2	3	4	5
The number of deer desired by hunters	1	2	3	4	5
The amount of damage done by deer to agricultural crops	1	2	3	4	5
The impact of deer on their natural habitat	1	2	3	4	5
The overall health of the deer herd	1	2	3	4	5

16. The IDNR is managing the deer herd in counties with CWD in order to control spread of the disease. Please indicate if you feel the following management options are acceptable or unacceptable by circling the number that matches your response.

Management Action	Completely Unacceptable	Somewhat Unacceptable	Unsure	Somewhat Acceptable	Completely Acceptable
Sharpshooting any deer	1	2	3	4	5
Sharpshooting only deer appearing to be sick	1	2	3	4	5
Lethal removal of deer causing agricultural damage	1	2	3	4	5
Increase hunting in urban areas (forest preserves, state parks, etc.) to reduce deer numbers	1	2	3	4	5
Lethal removal of deer causing property damage around homes	1	2	3	4	5
Take no action to manage CWD	1	2	3	4	5

17. Thinking about IDNR's approach to control CWD in the deer herd, do you believe the plan has been...?
(Please check one):

☐ Not aggressive enough ☐ Too aggressive
☐ About right ☐ I am not sure

18. How much do you disagree or agree with each of the following statements related to CWD? Please circle one number for each statement that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
The threat of CWD has been exaggerated.	1	2	3	4	5	6	7
Because of CWD, members of my family have concerns about eating deer meat.	1	2	3	4	5	6	7
CWD poses a risk to deer, but not to humans.	1	2	3	4	5	6	7
CWD may pose a risk to humans, but not enough is currently known to be sure.	1	2	3	4	5	6	7
CWD may cause disease in humans if they eat meat from animals infected with CWD.	1	2	3	4	5	6	7
Because of CWD, I have concerns about eating deer meat.	1	2	3	4	5	6	7

19. Please state how much you disagree or agree with the following statements about CWD in Illinois by circling the number that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
If left unchecked, CWD could spread throughout the Illinois deer herd.	1	2	3	4	5	6	7
If left unchecked, CWD could wipe out the deer herd across Illinois.	1	2	3	4	5	6	7
We should reduce the deer population in northern Illinois as much as needed to control CWD.	1	2	3	4	5	6	7
Hunters are more effective at managing CWD than IDNR has been.	1	2	3	4	5	6	7
CWD is natural and we should let it take its course in deer.	1	2	3	4	5	6	7
IDNR is exaggerating the threat CWD-infected venison poses to my health.	1	2	3	4	5	6	7
We should eliminate CWD from the deer population.	1	2	3	4	5	6	7
IDNR has taken the right steps to control the spread of CWD in Illinois.	1	2	3	4	5	6	7
Hunting can control CWD more effectively than sharpshooting.	1	2	3	4	5	6	7
CWD must be controlled in northern Illinois even if it means having fewer deer.	1	2	3	4	5	6	7
CWD is a serious threat to the deer herd in Illinois.	1	2	3	4	5	6	7
CWD will spread without sharpshooting operations in northern Illinois.	1	2	3	4	5	6	7
IDNR's sharpshooting program should continue until CWD is gone from the state.	1	2	3	4	5	6	7
IDNR's CWD management is similar to Wisconsin DNR	1	2	3	4	5	6	7

20. Please select the statement that best describes your opinion about the amount of resources (time/money/personnel) the IDNR should commit toward controlling the spread of CWD. **(Please check one)**

- ☐ They should commit more resources
☐ They should commit fewer resources
☐ They currently commit the right amount of resources
☐ I am not sure

21. To what extent do you disagree or agree with each of the following statements regarding your **trust** in the IDNR. **(Please circle one number for each statement that most closely matches your response).**

I trust the IDNR to....	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
... provide me with enough information to decide what actions I should take regarding CWD	1	2	3	4	5	6	7
... provide the best available information on CWD in Illinois	1	2	3	4	5	6	7
... make good deer management decisions regarding CWD issues	1	2	3	4	5	6	7
... provide adequate opportunities to listen to the publics' concerns about CWD	1	2	3	4	5	6	7
... provide timely information regarding CWD issues	1	2	3	4	5	6	7
... provide truthful information about human safety issues related to CWD	1	2	3	4	5	6	7
... provide truthful information about deer population estimates	1	2	3	4	5	6	7
... provide truthful information about how CWD spreads	1	2	3	4	5	6	7
... provide truthful information on the number of CWD-positive deer discovered in Illinois	1	2	3	4	5	6	7
... follow the best available science in managing CWD	1	2	3	4	5	6	7
... properly address CWD in Illinois	1	2	3	4	5	6	7

22. Are you aware of Wisconsin DNR's CWD management program?

☐ Yes (Please go to **Question 22a**)
 ☐ No (Please go to **Section 2**)

22a. If "Yes," please give your opinion of Wisconsin DNR's CWD management program by circling the number that matches your opinion.

Very Poor	Poor	Neutral	Good	Very Good
1	2	3	4	5

Section 2. Attitudes Toward Wildlife. Please indicate whether you disagree or agree with the following statements about wildlife by circling the number that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
It's important to me to know that there are healthy populations of fish and wildlife.	1	2	3	4	5	6	7
We should be sure future generations have an abundance of fish and wildlife.	1	2	3	4	5	6	7
Whether or not I get to see wildlife, it is important to know they exist.	1	2	3	4	5	6	7
Loss of habitat has more impact on wildlife populations than hunting.	1	2	3	4	5	6	7
Wildlife should have the same rights as people.	1	2	3	4	5	6	7
Wildlife should have the same rights as pets, but not humans.	1	2	3	4	5	6	7
The rights of wildlife to exist are more important than human use of wildlife.	1	2	3	4	5	6	7
Hunting is cruel and inhumane to animals.	1	2	3	4	5	6	7
Some species are not worth spending money to save.	1	2	3	4	5	6	7
Hunting to reduce wildlife that cause damage to crops is an acceptable practice.	1	2	3	4	5	6	7
Nature will control the health of wildlife populations without human interference.	1	2	3	4	5	6	7
Endangered species should be protected even at the cost of the economy and jobs.	1	2	3	4	5	6	7
Hunting for food is an acceptable activity.	1	2	3	4	5	6	7
Too much attention is given to wildlife in our society.	1	2	3	4	5	6	7
Hunting for trophy animals should not be tolerated.	1	2	3	4	5	6	7

Section 3. General Information. The following questions are important to help us understand more about you. Please tell us something about yourself by checking the responses that apply. All responses are kept confidential.

1. What is your gender? _____ Male _____ Female
2. Please give your age. _____ Years
3. What is your county of residence? _____ County
4. How long have you lived at your current address? _____ Years
5. How long have you lived in Illinois? _____ Years
6. Have you fed wildlife (birds, squirrels, etc.) on your property within the past 12 months?
_____ Yes _____ No
7. Have you experienced problems with deer around your home in the past 12 months?
_____ Yes _____ Yes, but not in the past 12 months _____ No

COMMENTS



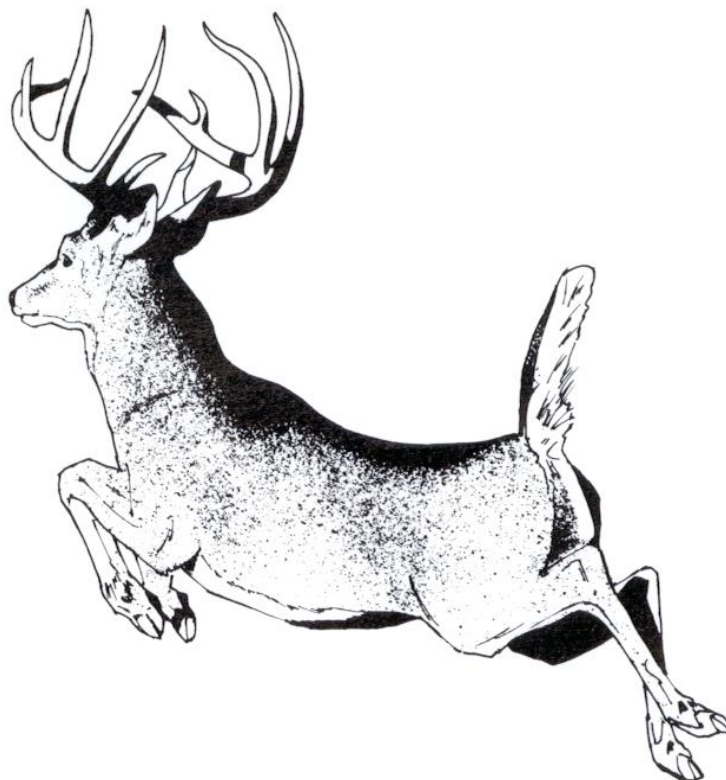
**THANK YOU FOR YOUR TIME AND
Please return this survey in the postage-paid**

**ASSISTANCE
envelope provided.**

The Illinois Department of Natural Resources receives federal assistance and therefore must comply with federal anti-discrimination laws. In compliance with the Illinois Human Rights Act, the Illinois Constitution, Title VI of the 1964 Civil Rights Act, Section 504 of the Rehabilitation Act as amended, and the U.S. Constitution, the Illinois Department of Natural Resources does not discriminate on the basis of race, color, sex, national origin, age, or disability. If you believe you have been discriminated against in any program, activity, or facility, please contact the Equal Employment Opportunity Officer, Department of Natural Resources, One Natural Resources Way, Springfield, IL 62701-1787, (217) 782-7616 or the Officer of Human Resources, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

Appendix C

Illinois Deer Hunter Survey



Illinois Department of Natural Resources
Division of Wildlife Resources
and
Illinois Natural History Survey



The Department of Natural Resources is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the Illinois Compiled Statutes, The Wildlife Code, Chapter 520. Disclosure of information is voluntary. This study is funded by the federal Wildlife Restoration Fund through your purchase of hunting arms and ammunition.

THANK YOU FOR YOUR COOPERATION

All of your responses will be kept confidential.
Please return this survey in the postage-paid return envelope provided

Section 1. Deer populations and management. Please answer the following questions about deer populations and management in Illinois.

1. Did you hunt deer during any of the **2011-12** Illinois deer seasons (archery, shotgun, muzzleloader, etc.)?

____ Yes ____ No (Please go to **Question 9**)

2. In the table below please give the county you hunted, number of days hunted and deer harvested **in Illinois** between October 1, 2011-January 15, 2012.

	County Hunted <u>Most Often</u>	Number of Days Hunted	Number of Deer Harvested	
			Antlered	Antlerless
Archery Seasons	_____	_____	_____	_____
Regular Firearm Season	_____	_____	_____	_____
Muzzleloader-only Season	_____	_____	_____	_____
Late-winter Firearm Season	_____	_____	_____	_____
Special CWD Season	_____	_____	_____	_____

3. In which county did you hunt deer **most often** during **all** 2011-12 deer seasons?

_____ County

4. How does the number of deer **you saw** during the 2011-12 season(s) compare to 5 years ago? Please circle the number that matches your response.

Decreased Considerably	Decreased Moderately	Decreased Slightly	No Change	Increased Slightly	Increased Moderately	Increased Considerably
1	2	3	4	5	6	7

5. Please describe the deer population in the county where you hunted deer most often during 2011-12. Circle the number that matches your response.

Too Low	Low	About Right	High	Too High
1	2	3	4	5

6. Please describe the **quality** of deer in the county where you hunted deer most often during 2011-12. Please circle the number that matches your response.

Very Low	Low	Average	High	Very High
1	2	3	4	5

7. How does the number of deer **you harvested** during the 2011-12 season(s) compare to 5 years ago? Please circle the number that matches your response.

Decreased Considerably	Decreased Moderately	Decreased Slightly	No Change	Increased Slightly	Increased Moderately	Increased Considerably
1	2	3	4	5	6	7

8. How do you think the **total** deer harvest in the county where you hunted deer most often during 2011-12 has changed over the past 5 years? Please circle the number that matches your response.

Decreased Considerably	Decreased Moderately	Decreased Slightly	No Change	Increased Slightly	Increased Moderately	Increased Considerably
1	2	3	4	5	6	7

9. How would you like to see the number of deer change during the next 5 years in the county where you hunt most often? Please circle the number that matches your response.

Decrease Considerably	Decrease Moderately	Decrease Slightly	No Change	Increase Slightly	Increase Moderately	Increase Considerably
1	2	3	4	5	6	7

10. Do you think the **total deer harvest in Illinois** over the past 5 years has decreased or increased? Please circle the number that matches your response.

Decreased Considerably	Decreased Moderately	Decreased Slightly	No Change	Increased Slightly	Increased Moderately	Increased Considerably
1	2	3	4	5	6	7

11. Please indicate how you would like to see each of the following change for deer hunting in Illinois. Please circle the number that matches your response.

	Large Decrease	Decrease	Slight Decrease	No Change	Slight Increase	Increase	Large Increase
The number of firearm deer permits available to hunters	1	2	3	4	5	6	7
The number of different deer seasons offered each year	1	2	3	4	5	6	7
The total number of deer a hunter can legally harvest	1	2	3	4	5	6	7
The number of <u>nonresident</u> deer hunters	1	2	3	4	5	6	7
The number of antlered bucks that a hunter can legally harvest	1	2	3	4	5	6	7
The number of days of firearm deer hunting (all firearm seasons)	1	2	3	4	5	6	7
The number of days of archery deer hunting	1	2	3	4	5	6	7

12. Please indicate how much you disagree or agree with the following statements related to deer management by circling the number that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
As long as deer are healthy, IDNR should not worry about the number of deer/vehicle accidents.	1	2	3	4	5	6	7
As long as deer are healthy, IDNR should not worry about crop damage.	1	2	3	4	5	6	7
Good deer management will result in deer populations that increase every year.	1	2	3	4	5	6	7
Higher deer populations will result in more deer-vehicle accidents	1	2	3	4	5	6	7
Sometimes deer numbers need to be reduced even when there is plenty of food for deer.	1	2	3	4	5	6	7
Deer damage to crops should be considered part of farming.	1	2	3	4	5	6	7
Quality of deer is more important than quantity of deer.	1	2	3	4	5	6	7
Deer management must balance the concerns of all Illinois citizens, not just deer hunters.	1	2	3	4	5	6	7
Deer populations have been overharvested during the past ten years in Illinois.	1	2	3	4	5	6	7
IDNR should manage for the greatest number of healthy deer possible.	1	2	3	4	5	6	7
The number of deer-vehicle accidents is not affected by the size of the deer population.	1	2	3	4	5	6	7

13. In your opinion, how much should each of the following factors be considered in setting deer population goals in Illinois? Please circle the number that matches your response.

	Not Important	Somewhat Important	Moderately Important	Very Important	Extremely Important
Number of deer acceptable to the general public	1	2	3	4	5
Amount of disease in the deer herd	1	2	3	4	5
Number of deer-vehicle accidents	1	2	3	4	5
Number of deer desired by hunters	1	2	3	4	5
Amount of damage from deer to agricultural crops	1	2	3	4	5
Impact of deer on their natural habitat	1	2	3	4	5
Damage by deer to residential landscaping/gardens	1	2	3	4	5
Overall health of the deer herd	1	2	3	4	5

Section 2. Chronic Wasting Disease in Illinois. Chronic Wasting Disease (CWD) is a disease of deer, elk, and moose that causes degeneration of the brain. Please complete the following questions related to Chronic Wasting Disease in ILLINOIS.

1. Do you live in a county in which CWD has been found in deer? _____ Yes _____ No _____ Not sure

2. Please indicate if you think the following statements are correct or incorrect by circling a number in the appropriate location.

Statement	Correct	Incorrect	I don't know
CWD has always been present in the Illinois deer herd	1	2	3
CWD is found in every state	1	2	3
CWD is a fatal disease to every deer infected	1	2	3
There is no known cure for CWD in deer	1	2	3
CWD does not exist in Illinois	1	2	3
CWD was found in Wisconsin before Illinois	1	2	3

3. How much risk do you feel from the following? Please circle the number that matches your response.

	No Risk	Slight Risk	Moderate Risk	High Risk
Contracting Lyme Disease	1	2	3	4
Becoming ill from Chronic Wasting Disease	1	2	3	4
Becoming ill from Salmonella food poisoning	1	2	3	4
Becoming ill from E. coli food poisoning	1	2	3	4
Contracting Rabies	1	2	3	4
Contracting West Nile Virus	1	2	3	4
Contracting Mad Cow (BSE) Disease	1	2	3	4

4. How many deer **statewide** do you believe have tested positive for CWD in the past 10 years in Illinois?

____ 0 ____ 1-10 ____ 11-50 ____ 51-100
 ____ 101-300 ____ 301-500 ____ 501-1,000 ____ > 1,000 ____ Don't know

5. Please tell us if you knew (before receiving this questionnaire) about each action below that was taken by IDNR in response to CWD by circling the number that matches your response.

IDNR Action	Yes, I knew this	No, I did not know this
Increased the number of deer permits available for hunting in CWD-affected counties	1	2
Conducting deer sharpshooting in known CWD areas to supplement hunting	1	2
Testing deer harvested by hunters in CWD-affected counties	1	2
Holding special CWD management hunts in CWD-affected counties	1	2
Testing deer from counties NOT affected by CWD	1	2
Reduce populations of deer in CWD-affected counties	1	2
Banned the feeding of wild deer	1	2
Funding research about CWD and its spread	1	2

6. How effective do you feel the following IDNR management actions have been in reducing CWD in deer? Please circle the number that matches your response.

Management Action	Not effective	Slightly effective	Somewhat effective	Effective	Very Effective	I am not sure
Increased deer harvest through hunting in CWD-affected counties	1	2	3	4	5	6
Used deer sharpshooting in known CWD areas to supplement hunting	1	2	3	4	5	6
Reduced populations of deer in CWD-affected counties	1	2	3	4	5	6
Held special CWD management hunts in CWD-affected counties	1	2	3	4	5	6

7. IDNR annually tests thousands of deer throughout the state to monitor CWD in Illinois. In your opinion, how important is this surveillance for each of the following purposes? Please circle the number for your response.

	Not Important	Somewhat Important	Moderately Important	Very Important	Extremely Important
Testing of deer in CWD counties to monitor local distribution and the percent of deer with the illness	1	2	3	4	5
Testing of deer in non-CWD counties to determine whether CWD has spread to new areas	1	2	3	4	5
Testing YOUR deer so that you can decide whether you should eat it	1	2	3	4	5

8. In your opinion, to what level do you think IDNR should pursue the actions listed below? Please circle the number that matches your response.

Action	Stop this action	Go slower with this action	Continue with this action	Increase the level of this action
Increase deer harvest through hunting in CWD-affected counties	1	2	3	4
Use deer sharpshooting in known CWD areas to supplement hunting	1	2	3	4
Testing deer harvested by hunters in CWD-affected counties	1	2	3	4
Holding special CWD management hunts in CWD-affected counties	1	2	3	4
Reduce populations of deer in CWD-affected counties	1	2	3	4
Testing deer harvested by hunters from counties NOT affected by CWD	1	2	3	4

9. Please rate your level of acceptance for each of the following management actions and potential outcomes by circling the number that matches your response.

Management Action	Completely Unacceptable	Somewhat Unacceptable	Unsure	Somewhat Acceptable	Completely Acceptable
Increase deer harvest through hunting in CWD-affected counties	1	2	3	4	5
Use deer sharpshooting in known CWD areas to supplement hunting	1	2	3	4	5
Holding special CWD management hunts in CWD-affected counties	1	2	3	4	5
Take no action to manage CWD	1	2	3	4	5

Potential Outcome	Completely Unacceptable	Somewhat Unacceptable	Unsure	Somewhat Acceptable	Completely Acceptable
Seeing <u>slightly</u> fewer deer because of CWD management	1	2	3	4	5
Increased spread of CWD into other parts of the state	1	2	3	4	5
Seeing <u>significantly</u> fewer deer because of CWD management	1	2	3	4	5
Significantly more CWD-infected deer in the population	1	2	3	4	5
Decreased deer hunter success in CWD-affected counties	1	2	3	4	5

10. Please choose **one response** from **each** of the **3 pairs below** that best matches your opinions about deer management in Illinois. Please check the statement that agrees most with your opinion.

Pair A

- ____ I favor ending IDNR sharpshooting with a higher likelihood of CWD spreading to more counties.
 ____ I favor continuing IDNR sharpshooting to reduce the likelihood of CWD spreading to more counties.

Pair B

- ____ I prefer more deer in the areas I hunt, even if it means a greater chance of shooting a deer with CWD.
 ____ I prefer fewer deer in the areas I hunt to have a lower chance of shooting a deer with CWD.

Pair C

- ____ Having a higher population of deer in Illinois is better than sharpshooting deer to control the spread of CWD.
 ____ Continued sharpshooting to reduce the population of deer in Northern Illinois is better than having CWD spread.

11. Which of the following strategies do you feel is the **most important** for IDNR to take in managing CWD in deer in Illinois? Please check **one** response.

- ____ Monitor CWD distribution and rate of infection, but take no action to manage it
 ____ Use existing hunting seasons alone to manage CWD
 ____ Use all methods necessary to manage CWD
 ____ Take no action and let nature take its course
 ____ I am not sure

12. Because of CWD, how concerned are you about each of the following issues? Please circle the number that matches your response.

	Not at all		Slightly		Moderately		Extremely	
<i>Because of CWD</i> , how concerned are you about...	Concerned		Concerned		Concerned		Concerned	
...your own personal health?	1	2	3	4	5	6	7	8
... the health of the deer population in Illinois?	1	2	3	4	5	6	7	8
...not having enough healthy deer left to hunt in Illinois?	1	2	3	4	5	6	7	8
...CWD spreading throughout the entire deer population in Illinois?	1	2	3	4	5	6	7	8
...the potential for CWD to dramatically reduce the deer population in Illinois?	1	2	3	4	5	6	7	8
... the potential for CWD to kill the entire deer population in Illinois?	1	2	3	4	5	6	7	8

13. How much do you disagree or agree with each of the following statements related to CWD? Please circle the number for each statement that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
The threat of CWD has been exaggerated.	1	2	3	4	5	6	7
Because of CWD, members of my family have concerns about eating deer meat.	1	2	3	4	5	6	7
CWD poses a risk to deer, but not to humans.	1	2	3	4	5	6	7
CWD may pose a risk to humans, but not enough is currently known to be sure.	1	2	3	4	5	6	7
CWD may cause disease in humans if they eat meat from animals infected with CWD.	1	2	3	4	5	6	7
Because of CWD, I have concerns about eating deer meat.	1	2	3	4	5	6	7

14. Please give your opinion about the amount of resources (time/money/personnel) the IDNR should commit toward controlling the spread of Chronic Wasting Disease? **(Please check one)**

- ☐ They should commit more resources
☐ They should commit fewer resources
☐ They currently commit just the right amount of resources
☐ I am not sure

15. Thinking about IDNR's approach to control CWD in the deer herd, do you believe the plan has been...? **(Please check one):**

- ☐ Not aggressive enough ☐ Too aggressive
☐ About right ☐ I am not sure

16. If sharpshooting is the most effective method in controlling the spread of CWD in Illinois, please give your opinion of the sharpshooting program by selecting one of the responses below.

- ☐ I feel it should be increased ☐ I feel it should be decreased
☐ I feel it should stay as it is ☐ I feel it should be eliminated

17. To what extent do you disagree or agree with each of the following statements regarding your **trust** in IDNR. (Please circle one number for *each* statement that most closely matches your response)

I trust IDNR to....	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
... provide me with enough information to decide what actions I should take regarding CWD	1	2	3	4	5	6	7
... provide the best available information on CWD in Illinois	1	2	3	4	5	6	7
... make good deer management decisions regarding CWD issues	1	2	3	4	5	6	7
... provide adequate opportunities to listen to hunters' concerns about CWD	1	2	3	4	5	6	7
... provide timely information regarding CWD issues	1	2	3	4	5	6	7
... provide truthful information about human safety issues related to CWD	1	2	3	4	5	6	7
... provide truthful information about deer population estimates	1	2	3	4	5	6	7
... provide truthful information about how CWD spreads	1	2	3	4	5	6	7
... provide truthful information on the number of CWD-positive deer discovered in Illinois	1	2	3	4	5	6	7
... follow the best available science in managing CWD	1	2	3	4	5	6	7
... properly address CWD in Illinois	1	2	3	4	5	6	7

18. The presence of CWD may change deer hunting for some deer hunters. Please use the statements below to provide your response to each scenario and circle **one** number that matches your response in the space provided.

In the county where you hunt, what would you do if CWD is found in...	<u>I will hunt</u> as usual, and...				<u>I will NOT</u> hunt as usual, and...		
	...eat deer meat if I harvest a deer	... eat deer meat, but my family will not	... not eat deer meat	... only eat deer meat if I am first able to have it tested for CWD	...hunt deer in a different county	... not hunt deer in Illinois, but will go out of state to hunt deer	... not go deer hunting at all
... 1 out of 1,000 deer	1	2	3	4	5	6	7
... 1 out of 100 deer	1	2	3	4	5	6	7
... 1 out of 10 deer	1	2	3	4	5	6	7
... 2 out of 10 deer	1	2	3	4	5	6	7
... 3 out of 10 deer	1	2	3	4	5	6	7
... 5 out of 10 deer	1	2	3	4	5	6	7
... 10 out of 10 deer	1	2	3	4	5	6	7

19. Please state how much you disagree or agree with the following statements about CWD in Illinois by circling the number that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
If left unchecked, CWD could spread throughout the Illinois deer herd.	1	2	3	4	5	6	7
If left unchecked, CWD could wipe out the deer herd across Illinois.	1	2	3	4	5	6	7
We should reduce the deer population in northern Illinois as much as needed to control CWD.	1	2	3	4	5	6	7
Hunters are more effective at managing CWD than IDNR has been.	1	2	3	4	5	6	7
CWD is natural and we should let it take its course in deer.	1	2	3	4	5	6	7
IDNR is exaggerating the risk CWD-infected venison poses to my health.	1	2	3	4	5	6	7
We should eliminate CWD from the deer population.	1	2	3	4	5	6	7
IDNR has taken the right steps to control the spread of CWD in Illinois.	1	2	3	4	5	6	7
Hunting can control CWD more effectively than sharpshooting.	1	2	3	4	5	6	7
CWD must be controlled in northern Illinois even if it means having fewer deer.	1	2	3	4	5	6	7
CWD is a serious threat to the deer herd in Illinois.	1	2	3	4	5	6	7
CWD will spread without sharpshooting operations in northern Illinois.	1	2	3	4	5	6	7
IDNR's CWD management is similar to Wisconsin DNR.	1	2	3	4	5	6	7
IDNR's sharpshooting program should continue until CWD is gone from the state.	1	2	3	4	5	6	7

Section 3. Background. The following questions are important to help us understand more about the people involved in deer hunting in Illinois. All responses are kept confidential.

1. What is your county of residence? _____ County
2. Please give your age. _____ years
3. What is your gender? _____ Male _____ Female
4. About how many years total have you hunted deer? _____ years
5. About how many years have you hunted deer in Illinois? _____ years
6. Which of the following describes how often you hunt deer in Illinois? Choose one.
_____ every year _____ most years _____ some but not most years
- 6a. If you don't hunt every year, do you buy an Illinois hunting license each year?
_____ Yes _____ No
- 6b. If you don't hunt every year, please choose the statements below that describes your reason for not hunting.
_____ Fewer deer where I hunt _____ Didn't draw a permit
_____ Too expensive _____ Lost interest
_____ No access to places to hunt _____ Not enough time
_____ Deer hunting takes too much effort _____ Poor health
_____ Other (*Please identify*): _____
7. Have you (as an Illinois resident) **hunted deer (any species) or elk** as a nonresident in a state other than Illinois?
_____ Yes _____ No (Please go to **question 10**)
- 7a. In which state(s) have you hunted?: _____
8. What type of deer or elk hunting did you do in other states? Please check all that apply.
_____ firearm _____ archery _____ muzzleloader
9. How often did you hunt deer or elk in another state? Please check one response.
_____ more than 10 seasons _____ 2 - 5 seasons
_____ more than 5 seasons, but less than 10 _____ one season
10. Do you plan to hunt deer or elk in another state in the upcoming year (2012)?
_____ Yes Which state(s)?: _____
_____ No

11. Do you watch deer hunting shows (TV, DVDs, Internet, etc.)?

____ Yes ____ No (Please go to **question 15**)

12. Which do you use *most often* to watch deer hunting shows? (Please check one.)

____ Internet ____ DVDs ____ TV

13. If you watch deer hunting shows, how often have you watched shows in the past 12 months?

____ Every week ____ Between 5 and 12 times in the past year
____ About 2-3 times a month ____ Less than 5 times in the past year

14. Which of the following **best describes** why you watch deer hunting shows? Please choose one response.

____ to learn new hunting techniques ____ to learn about wildlife management
____ to get ideas where to take hunting trips ____ to see hunts in different locations
____ to be entertained ____ to watch trophy deer get harvested

15. If you could hunt only one day, which of the following would you hunt? Please **check ONE response**.

____ ducks ____ geese ____ deer (archery) ____ deer (firearm)
____ furbearers ____ pheasants ____ quail ____ squirrels
____ rabbits ____ doves ____ turkeys ____ others (please identify): _____

16. Are you aware of Wisconsin DNR's CWD management program?

____ Yes ____ No

16a. If "Yes," please give your opinion of Wisconsin DNR's CWD management program by circling the number that matches your opinion.

Very Poor	Poor	Neutral	Good	Very Good
1	2	3	4	5



THANK YOU FOR YOUR TIME AND ASSISTANCE!
Please return this survey in the postage-paid envelope provided.

The Illinois Department of Natural Resources receives federal assistance and therefore must comply with federal anti-discrimination laws. In compliance with the Illinois Human Rights Act, the Illinois Constitution, Title VI of the 1964 Civil Rights Act, Section 504 of the Rehabilitation Act as amended, and the U.S. Constitution, the Illinois Department of Natural Resources does not discriminate on the basis of race, color, sex, national origin, age, or disability. If you believe you have been discriminated against in any program, activity, or facility, please contact the Equal Employment Opportunity Officer, Department of Natural Resources, One Natural Resources Way, Springfield, IL 62701-1787, (217) 782-7616 or the Officer of Human Resources, U.S. Fish and Wildlife Service, Washington, D.C. 20240.



ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute
University of Illinois at Urbana-Champaign

July 20, 2012

Dear Illinois Deer Hunter,

You are one of a select group of Illinois hunters asked to provide information about your thoughts on Chronic Wasting Disease (CWD) management and your hunting activities during the 2011-2012 hunting season. Please complete the enclosed questionnaire and return it to us as soon as possible. The information you and other selected hunters furnish Illinois Department of Natural Resources (IDNR) biologists is vital for proper wildlife management and allows IDNR to safeguard deer populations while maximizing hunting opportunities.

This survey is limited to those hunters selected. Please take 15 minutes to complete the enclosed questionnaire **even if you were not successful or have not heard about CWD**. A postage-paid envelope is provided for returning the questionnaire to us.

You may access the results of this and other studies of hunters and hunting in Illinois at <http://www.inhs.illinois.edu/programs/hd/>. You may also find information about Illinois Department of Natural Resources wildlife management programs and wildlife in Illinois at <http://dnr.state.il.us/orc/wildliferesources/>.

Thank you for your time and assistance.

Sincerely,


Craig A. Miller
Human Dimensions Research Program

Appendix E.

Dear Illinois Deer Hunter,

Recently you were mailed a questionnaire about your deer hunting activities and Chronic Wasting Disease (CWD) in Illinois. We have not yet received your response. **If you have already returned the questionnaire, we thank you. If you have not returned the questionnaire, please do so as soon as possible. Your input is very important!**

Your name and address will be deleted from our mailing list when your questionnaire is received. Thank you for your cooperation.

